

City of Manteca
The Crossings Manteca Project
Minor Use Permit (UPN-21-65)
Site Plan/Design Review (SPC-21-64)
Tentative Parcel Map
Commercial Planned Development (PCD 22-019)
Rezone (REZ 22-021)
Site Plan/Design Review (SPC 22-002)
Environmental Document (EIR 22-020)
Draft Initial Study and Mitigated Negative Declaration

Prepared for
City of Manteca
City of Manteca Development Services Department
1215 W. Center St. Suite 201
Manteca, CA 95337



June 2022

Prepared by
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Kimley»»Horn

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1.0 INTRODUCTION & PURPOSE

1.1 Purpose and Scope of the Initial Study

This Initial Study/Mitigated Negative Declaration (IS/MND) has been prepared in accordance with the California Environmental Quality Act (CEQA) (California Public Resources Code [PRC] Section 21000 et seq.) and its Guidelines (California Code of Regulations [CCR], Title 14, Section 15000 et seq.), to evaluate the potential environmental effects associated with the construction and operation of the Crossings Project. Pursuant to Section 15367 of the State CEQA Guidelines, the City of Manteca (City) is the lead agency for the Project. The lead agency is the public agency that has the principal responsibility for carrying out or approving a project.

As set forth in the State CEQA Guidelines Section 15070, an IS/MND can be prepared when the Initial Study has identified potentially significant environmental impacts, but revisions have been made to a project, prior to public review of the Initial Study, that would avoid or mitigate the impacts to a level considered less than significant; and there is no substantial evidence in light of the whole record before the public agency that the project, as revised, may have a significant effect on the environment.

1.2 Summary of Findings

Section 3.0 of this document contains the Environmental Checklist that was prepared for the proposed Project pursuant to CEQA requirements. The Environmental Checklist indicates whether the proposed Project would result in significant impacts with the implementation of mitigation measures, as identified throughout this document.

MITIGATION MEASURES

State CEQA Guidelines Section 15041, *Authority to Mitigate*, gives the lead agency for a project the authority to require feasible changes in any or all activities involved in the project in order to substantially lessen or avoid significant effects on the environment, consistent with applicable constitutional requirements such as the “nexus” and “rough proportionality” standards. CEQA Guidelines Section 15364 defines “feasible” as capable of being accomplished in a successful manner within a reasonable period of time, considering economic, environmental, legal, social, and technological factors. Mitigation measures will be adopted to reduce the environmental impacts to less than significant levels and must be consistent with all applicable constitutional requirements, including the following:

- There must be an essential nexus (i.e., connections) between the mitigation measure and legitimate governmental interest.
- The mitigation measure be “roughly proportional” to the impacts of the project.

Several forms of mitigation under CEQA Section 15370 are summarized as follow:

- Avoiding the **impact** by not taking a certain action(s);
- **Minimizing** impacts by limiting the degree or magnitude of the action and its implementation;

- **Rectifying** the impact by repairing, rehabilitating, or restoring the impact environment;
- **Reducing** or eliminating the impact over time by preservation and maintenance operations during the life of the action; and
- **Compensating** for the impact by replacing or providing substitute resources or environment.

Avoiding impacts is the preferred form of mitigation, followed by minimizing or rectifying the impact to less than significant levels. Compensating for impacts would be pursued if no other form of mitigation is feasible.

ENVIRONMENTAL RESOURCE TOPICS

This IS/MND evaluates the proposed Project's impacts on the following resource topic:

- | | |
|---------------------------------------|---------------------------------|
| ▪ Aesthetics | ▪ Hydrology and Water Quality |
| ▪ Agricultural and Forestry Resources | ▪ Land Use and Planning |
| ▪ Air Quality | ▪ Mineral Resources |
| ▪ Biological Resources | ▪ Noise |
| ▪ Cultural Resources | ▪ Population and Housing |
| ▪ Energy | ▪ Public Services |
| ▪ Geology and Soils | ▪ Transportation |
| ▪ Greenhouse Gas Emissions | ▪ Utilities and Service Systems |
| ▪ Hazard and Hazardous Materials | ▪ Wildfire |

1.3 Initial Study Public Review Process

The Initial Study and a Notice of Intent (NOI) to adopt this MND will be distributed to responsible and trustee agencies, other affected agencies, and other parties for a 30-day public review period.

Written comments regarding this MND should be addressed to:

Lea Simvoulakis
City of Manteca Development Services Department
1215 W. Center St. Suite 201
Manteca, CA 95337
lsimvoulakis@ci.manteca.ca.us

1.4 Report Organization

This document has been organized into the following sections:

Section 1.0 – Introduction. This section provides an introduction and overview describing the conclusions of the Initial Study.

Section 2.0 – Project Description. This section identifies key project characteristics and includes a list of anticipated discretionary actions.

Section 3.0 – Initial Study Checklist. The Environmental Checklist Form provides an overview of the potential impacts that may or may not result from project implementation.

Section 4.0 – Environmental Factors Potentially Affected. This section identifies the environmental factors that could be potentially affected by the proposed project.

Section 5.0 – Environmental Evaluation. This section contains an analysis of environmental impacts identified in the environmental checklist.

Section 6.0 – References. The section identifies resources used to prepare the Initial Study.

2.0 DESCRIPTION OF PROPOSED PROJECT

2.1 Project Location

The project is located in the City of Manteca within San Joaquin County, California. The project site is located in the southwest corner of the City of Manteca's boundaries. The center of town is located approximately 2.5 miles to the northeast. The site is directly south of the State Route (SR) 120 eastbound off ramp at Airport Way (Exit 3). The project is comprised of two Assessor's Parcel Numbers (APNs), 241-320-58, in the top west corner, and 241-320-44. The project site has two street addresses: 2303 W Atherton Drive and 1527 S Airport Way. Please see **Figure 1, Regional Map** and **Figure 2, Vicinity Map**.

2.2 Environmental Setting

REGIONAL SETTING

The City of Manteca is located in central California, approximately 65 miles directly east of San Francisco and 12 miles south of Stockton. Manteca is located within an area of California called the Central Valley. This area is an elongated valley occupying the central region of California, running on average 50 miles wide and 400 miles from north to south (USGS, 2021). The project site falls within an area of the Central Valley called the San Joaquin Basin. The San Joaquin River flows through the basin with outlets to the San Francisco Bay and Pacific Ocean. The City of Manteca is located at the top northwest boundary of the basin. The project site is shown on the U.S. Geological Survey's Lathrop, California, 7.5-minute quadrangle map (See **Figure 3, U.S. Topographic Map**).

LOCAL SETTING

The area to the northeast of the project site, toward the center of town, is predominantly developed, including residential, commercial, and industrial uses. To the South and West of the site is agriculture and low density residential, designated LDR in the General Plan. Directly southwest of the project site is W Atherton Drive and opposite that is a single-family residential community designated LDR. South of APN 241-320-44 is a previously disturbed undeveloped site, designated general commercial (GC) in the General Plan. Immediately west is another previously disturbed undeveloped lot designated GC. Directly north of the site is the off ramp for SR 120. Directly east of the site is Airport Way and on the opposite side of the road is a previously disturbed undeveloped lot, similar shape to the project site, that is also GC (City of Manteca, 2021).

The project site is currently previously disturbed undeveloped land, with minimal brush scrub vegetation. The top west section of 2303 W Atherton Dr or APN 241-320-58 is also previously disturbed undeveloped land, however, a portion of the APN is developed and currently under commercial use as Sterling Home Showcase. There is hardscape and landscaping, including trees, within this portion of the site and approximately 11 buildings.

The proposed project area has existing utility stubs provided on site, street lighting along Atherton Drive and Airport way, and existing curbs, gutters, and sidewalks along the frontage of the parcel. This covers a majority of the east project site border and wraps around the southern border stopping at the end of the developed section of 2303 W Atherton Dr.

The project site itself is designated GC in the General Plan and zoned CG (General Commercial Zoning District) in the Municipal Code (City of Manteca, 2011). The Municipal Code describes this area as:

“... wholesale, warehousing, and heavy commercial uses, highway-oriented commercial retail, public and quasi-public uses, and similar and compatible uses. The designation is also intended to accommodate visitor lodging, commercial recreation and public gathering facilities, such as amphitheaters, or public gardens. It also allows most neighborhood and mixed commercial uses.”

The proposed development on the site would require project specific use permits depending on the commercial use. The proposed Maverik Gas Station in the southeast corner of the site is permitted upon issuance of a Minor Use Permit and Site Plan Review within the General Commercial Zoning District.

2.3 Proposed Project

The proposed project, called The Crossings, proposes a 17.6 acre mixed commercial use development, including 11 buildings, parking, and pocket park located at 2303 W Atherton Drive and 1527 S Airport Way. The proposed development can be defined by four major components: The Hotel, Anchor Tennant Building 1, Commercial Shops A-H, and the Maverik Gas Station. Please see **Figure 4: Site Plan**.

1. The Hotel site is approximately 2.41 acres with 117 hotel rooms and 121 parking stalls.
2. Major Tennant Building 1 is approximately 55,000 square feet with 220 parking stalls,
3. Commercial Shops A-H total approximately 42,700 square feet with 291 parking stalls, and
4. Maverik Gas Station is approximately 6,140 square feet with 38 parking stalls.

The Crossings has a total of 7 access points, 2 of which are associated solely with the Hotel. The main entrance into the Crossing Project site is located off of W Atherton Drive and across from Langum Way. There is a proposed signalized intersection at this location as well. There are 2 access points north of the proposed signalized intersection that would lead to the proposed Major Building 1. One leading around the back of the building and one to the west end of the central parking lot. East the of the signalized intersection entrance, there is an access point that leads directly to the gas station. Additionally, there is one final right-in right-out access point off of Airport Way, on the east boundary of the project site. This leads to Commercial Shops to the north and the gas station to the south.

Within The Crossings project site the hotel is connected to the commercial parking lot through a drive aisle north of the hotel. Within the project site, Shops A, B, D, E, F, G, and the Gas Station all have roads wrapping around the building with parking off the building front. The project site also contains a picnic area/pocket park located between buildings F and G, along the northern boundary. Landscaping throughout The Crossings would remain consistent to give an overall cohesive look and would conform to the City's landscape requirements. There are no required land use changes, as the proposed mixed-use development is consistent with the existing land use designations. There is one existing 2,200 square foot office building located in the northwest corner of the site that would require demolition. Grading over the entire site would consist of 32,700 cubic yards of balanced cut and fill and occur over a 7-day period. The proposed development would tie into existing water, stormwater, sewer, gas, electrical, and telecommunications utilities located within Atherton drive.

PROJECT COMPONENTS:***Hotel:***

The hotel is located in the top west corner of the project site on approximately 2.41 acres. It contains a 4-story building containing 117 hotel rooms, 121 parking stalls including handicap accessible stalls, a pool, and an outdoor patio. To enter and exit the hotel there are two access points off of Atherton Dr, one on either end of the building that circle around the hotel. Additionally, the drive aisle north of the hotel connects to the commercial uses on the Crossings Project site. The driveway wrapping around the pool and building is lined with parking stalls. Landscaping around the site includes condensed trees on the southeast end which creates a boundary between the rest of The Crossings project site.

Major Building 1:

Major Building 1 is a potential grocery store with an approximately 55,000 square foot building and a parking lot. The building and parking lot would be located in the northwest/center section of The Crossings project site. To access the major centralized building there would be three primary access points. The one located furthest west would wrap around the back of the building. The other two would be located on both ends of the associated parking lot. The major building would also have two delivery truck loading and unloading stations along the back of the building which faces northwest. The front of the building would face southeast with the associated parking lot beyond it including 220 parking stalls with handicap accessible and Electric Vehicle (EV) charging stalls.

Commercial Shops (A-H):

The proposed commercial retail (Shops A-H) throughout The Crossings project site would be primarily focused in the center and northeast corner. There are eight proposed buildings, with a total of 42,700 square feet and 291 parking stalls. These commercial retail uses potentially include, retail shops, a vehicle service station, restaurants (sit down and quick service restaurants), etc. Shops A-H are located along the boundaries of the site. Shops J (10,900 square feet) and A (6,400 square feet) are located on the south boundary of the site and face out toward the central parking lot. Shop B is located along the west boundary of the project site to the east of the proposed signalized intersection. Building B (2,000 square feet) may be a vehicle service station, and therefore has a drive through configuration with parking along the east side of the building. Shops (C, D, E, and F) are all located in the northeast corner of The Crossings site with approximately 106 parking stalls located in the center including handicap accessible and EV charging stalls. Shop C would be 4,000 square feet with sidewalks connecting it to shops D and E and the Gas Station. Building D (5,000 square feet) and E (950 square feet), located further northeast, along the project site boundary, face west and have two proposed drive through lanes wrapping around the buildings starting on the south end of Shop D. Shop F is approximately 3,000 square feet and located along the north project boundary. Shop F also proposes a wrap-around driveway and would face south. Shop G, approximately 5,000 square feet, would be located further west along the northern project boundary. It also would have a road wrapping around the back of the building. Located between Shop F and G on the northern project boundary would be a picnic/pocket park area of approximately 6,500 square feet.

Gas Station:

The Maverik Gas Station is located in the southeast corner of the project site. The proposed convenience store building is approximately 6,140 square feet, has 1 entrance on the west side of the building, 2 entrances on the south, and 2 entrances on the east side. The convenience store would provide fueling, packaged beer and wine sales, as well as fresh food items, and restroom facilities which would be open to the public. The convenience store would operate 24 hours a day, 7 days a week. The gas station would include 7 fuel dispensers (14 fueling positions) with a canopy on the east side of the building and 4 commercial fuel dispensers (8 fueling positions) with a canopy on the west of the building. The gas station would sell both diesel and gasoline fuel. The gas station also includes a self-service air tire pump, RV dumping, a bike rack, and outdoor picnic tables. The gas station would receive approximately 1 fuel delivery per day and 2 deliveries for the convenience store. See **Figure 5, Maverik Gas Station Site Plan**.

Store Exterior

The building elevations, building materials and floor plan depict the architectural style and themes of the Maverik brand. The exterior of the building would consist of metal roof elements, fiber cement, cultured stone, glass storefront, steel truss beams, etc. HVAC equipment would be situated on the store roof and screened from view by a parapet wall and is consistent with code requirements for screening roof mounted mechanical equipment and blending in with the surrounding community. The fuel canopy includes the same architectural elements and materials, so the design is consistent throughout the Maverik Gas Station.

Traffic access and Parking

There are 38 parking stalls associated with the gas station. There are 19 stalls on the east side of the building, including, 2 handicap stalls, one van accessible. Seven stalls would be pre-wired for EV parking, with one van accessible.

The Crossings project proposes pavement in a U shape surrounding the building. To access the refueling stations and convenience store, there is a right-in right-out access point to the northeast of the building (also leading to the northeast corner of the site) off of Airport Way. Another entrance to the gas station would be from W Atherton Drive, on the south boundary of the project site. Other entrances to the gas station would be from the northwest within The Crossings site.

Fuel

There are a proposed three underground fuel tanks located directly west of the building that would supply the site. The gas station would have an annual throughput of 2,862,000 gallons of unleaded fuel and 2,438,000 gallons of diesel fuel on an annual basis.

Stormwater

The Maverik site includes 2 bioretention basins, one in the southeast corner approximately 1,240 square feet and 1.5 feet deep, and the other on the southwest side approximately 2,150 square feet and 1.6 ft deep. Stormwater at the site would be collected and run through a catch basin with an oil & gas separator, to a bioretention basin, and then to a proposed 18-inch storm drain that would connect to an existing stormwater drain in W. Atherton Drive.

Utilities

The Crossings site would tie into existing water, stormwater, sewer, gas, electrical, and telecommunications utilities located within Atherton drive. Stormwater from the site would connect to an existing 18-inch stormwater drain in W. Atherton Drive. The project also proposes tying a 6-inch sewer line into an existing 8-inch lateral sewer line, at a proposed manhole on the southern border of the project site off of W. Atherton Drive.

OFFSITE IMPROVEMENTS

Offsite improvements include the construction of two traffic signals and street median improvements at the intersections adjacent to the project site. The first traffic signal would be installed at the intersection of W. Atherton Drive and Langum Way. This traffic signal would control traffic coming in and out of the main driveway of the retail center. Street median improvements on W. Atherton Way include both raised and painted medians to guide traffic into appropriate turns lanes at the driveways and traffic signal. The improvements would occur along the project frontage of W. Atherton Drive.

A second traffic signal is proposed at the intersection of W. Atherton Drive and Airport Way. This signal would control the movements of cars at this existing four-way intersection that is currently controlled with stop signs. Both raised and painted medians are proposed within Airport Way to guide traffic coming southbound into the intersection and into the right-in and right-out project driveway on Airport Drive. The improvements would occur along the project frontage of Airport Drive.

All of the offsite improvements would occur within the existing roadway or existing Right-of-Way. No additional Right-of-Way is required for the offsite improvements.



SOURCE: ESRI, 2021

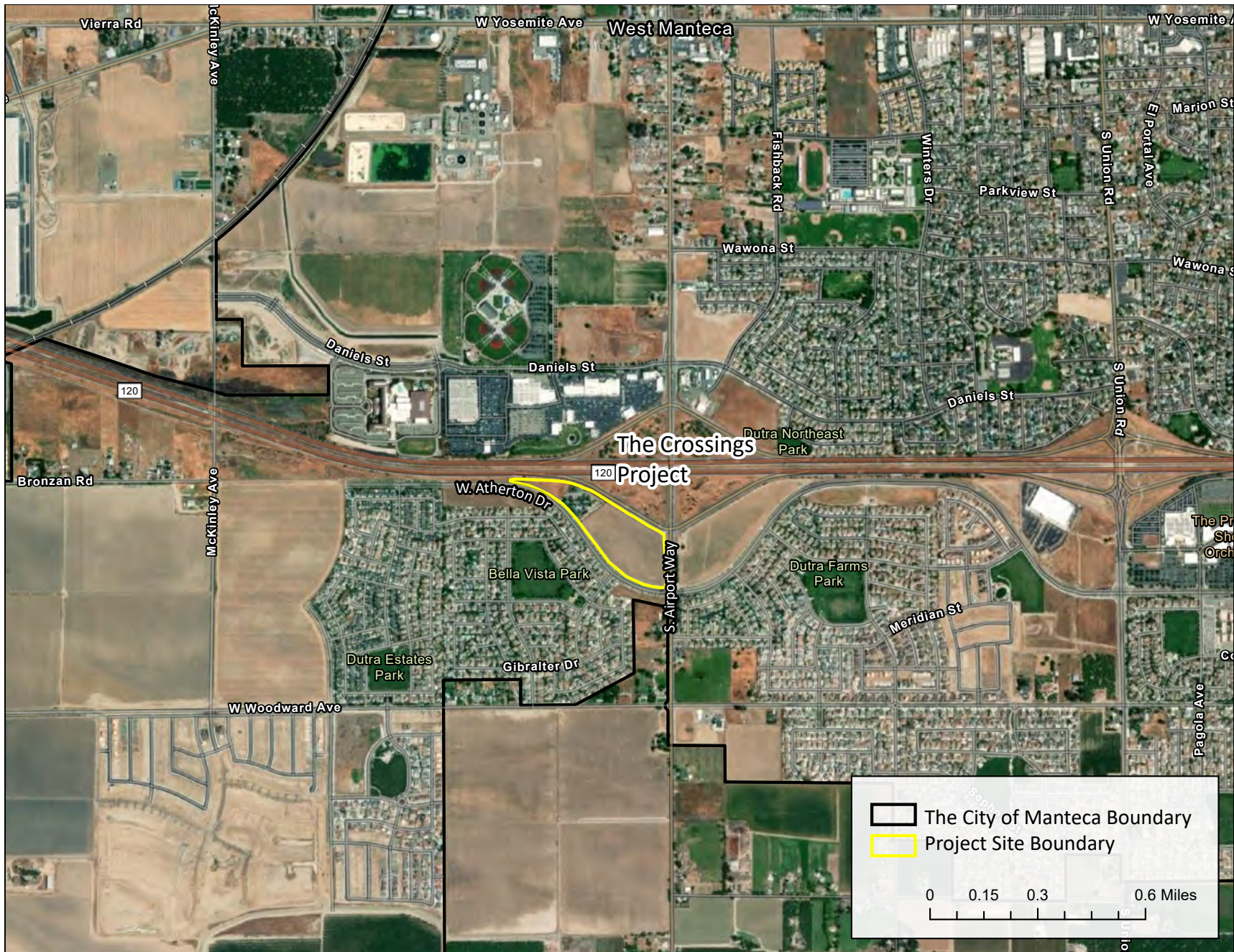
Figure 1 Regional Map

The Crossings
Initial Study/Mitigated Negative Declaration



Not to scale

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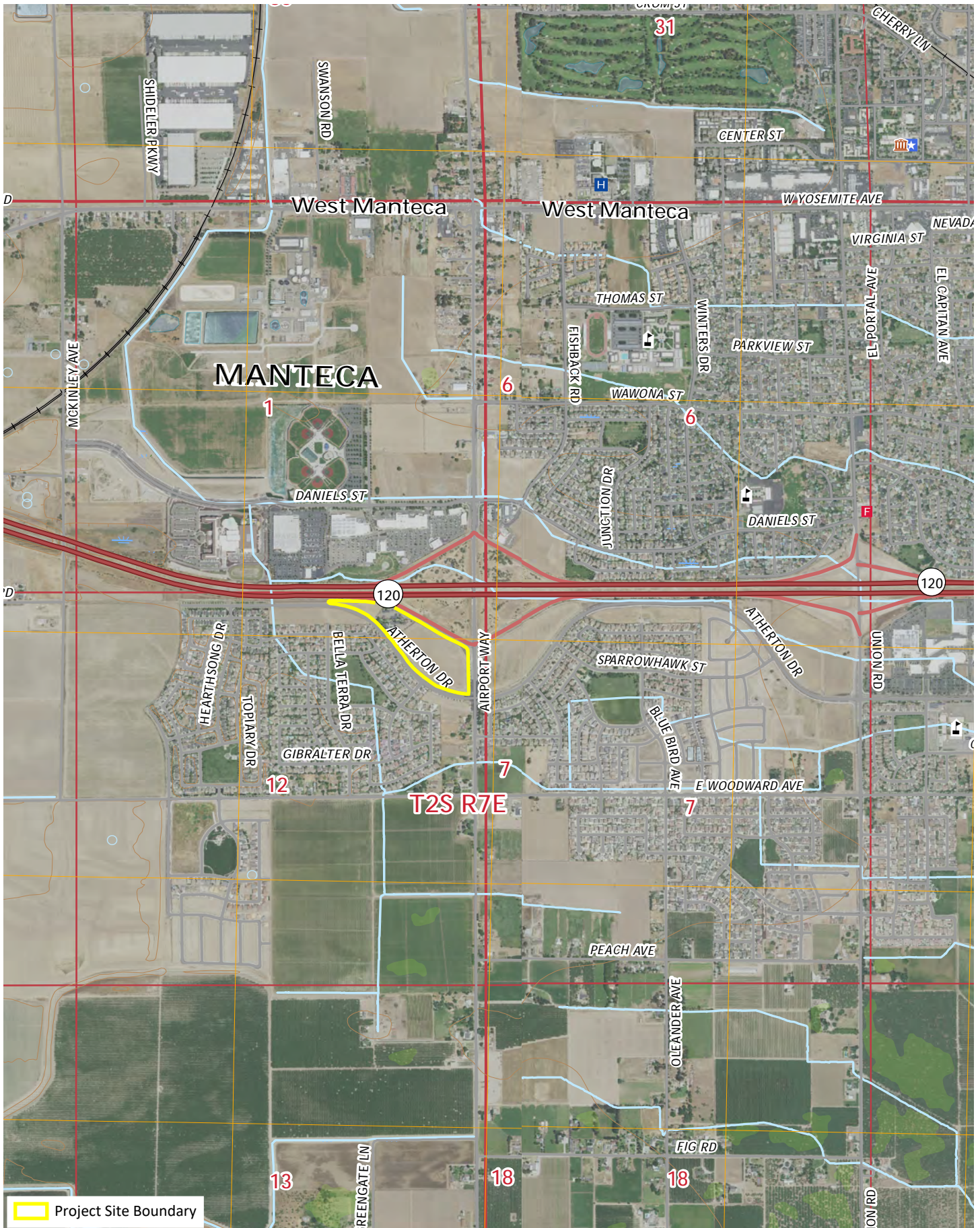
SOURCE: ESRI, 2021

Figure 2 Local Vicinity Map
 The Crossings
 Initial Study/Mitigated Negative Declaration



Not to scale

Kimley»Horn



SOURCE: USGS and USDOI, 7.5-Minute Series Lathrop and Manteca Quadrangle, 2021

Figure 3 USGS Topographic Map

The Crossings
Initial Study/Mitigated Negative Declaration



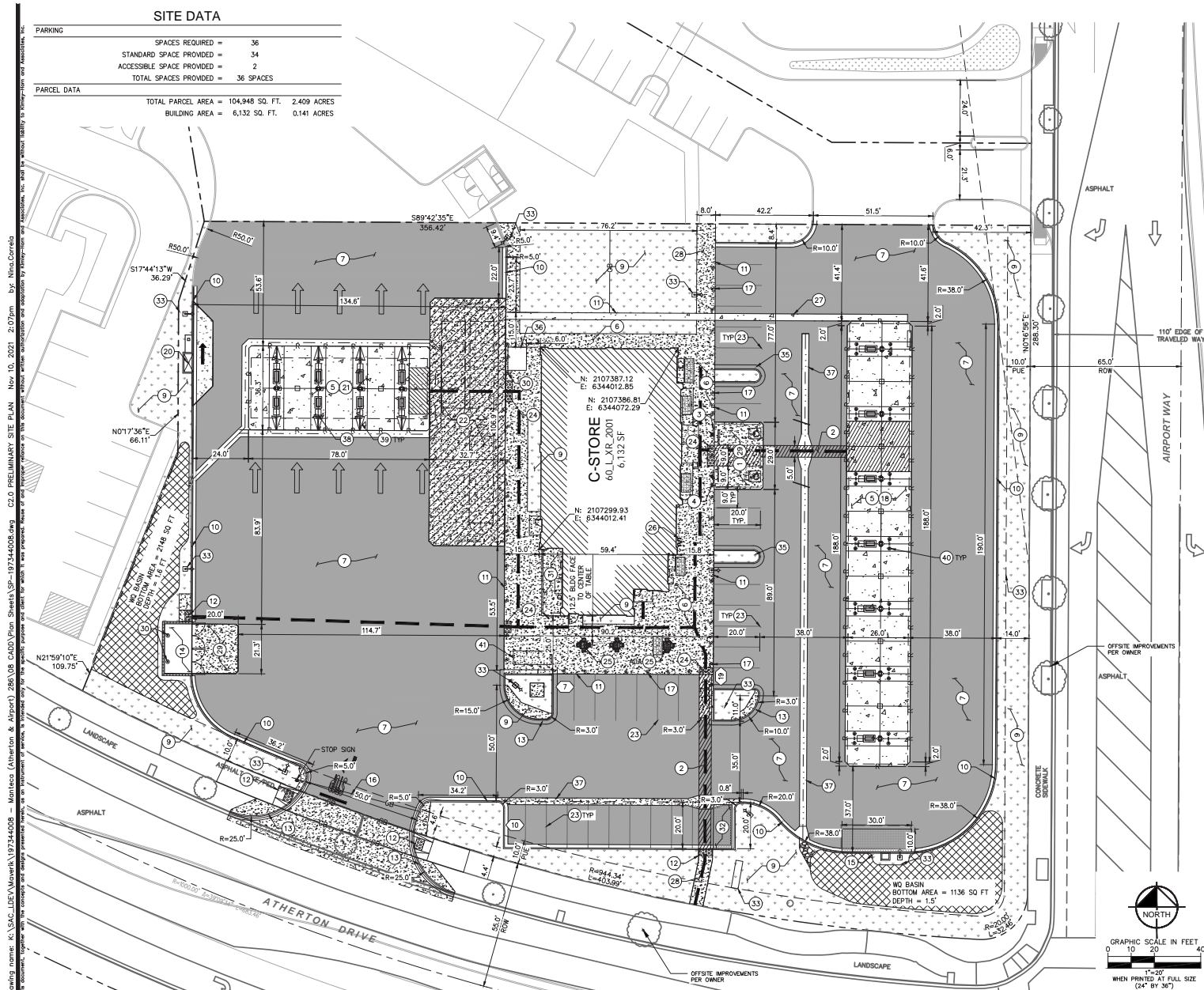
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SOURCE: Reynolds and Brown, 2022

Figure 4 Site Plan
The Crossings
Initial Study/Mitigated Negative Declaration



SOURCE: Kimley-Horn, 2021

Figure 5 Maverik Gas Station Site Plan

The Crossings

Initial Study/Mitigated Negative Declaration



Not to scale

Kimley»Horn



Source: Nearmap, 2022

Figure 6: Noise Measurement Locations

The Crossing
Initial Study/Mitigated Negative Declaration



Not to scale

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3.0 INITIAL STUDY CHECKLIST

NOTE: The following is a sample form that may be tailored to satisfy individual agencies' needs and project circumstances. It may be used to meet the requirements for an initial study when the criteria set forth in CEQA Guidelines have been met. Substantial evidence of potential impacts that are not listed on this form must also be considered. The sample questions in this form are intended to encourage thoughtful assessment of impacts, and do not necessarily represent thresholds of significance.

1. Project title:

The Crossings Manteca Project

2. Lead agency name and address:

The City of Manteca
Development Services Department
1215 W. Center St., Suite 201
Manteca, California 95337

3. Contact person and phone number:

Scott Speer, (209) 456.8565
sspeer@ci.manteca.ca.us

4. Project location:

2303 W Atherton Dr and 1527 S Airport Way
Manteca, California 95337

5. Project sponsor's name and address:

Maverik
Christie Hutchings, AICP
Sr. Planning Project Manager
1885 South State Street, Suite 800
Salt Lake City, Utah 84111

6. General plan designation:

General Commercial (GC)

7. Zoning:

General Commercial Zoning District (CG)

8. Description of project: (Describe the whole action involved, including but not limited to later phases of the project, and any secondary, support, or off-site features necessary for its implementation. Attach additional sheets if necessary.)

The Crossings project proposes a 17.6 acre mixed commercial use development, including retail stores, grocery, a gas station, auto-related services, restaurants (sit down and QSR's), coffee, hotel, etc. The project is currently vacant land with existing utility stubs provided on site, street lighting exists along Atherton Drive and Airport way, and existing curb, gutter, sidewalk exist and appear to be of adequate width along the frontage of the parcel. Additional site improvements include, but are not limited to grading, landscaping, hardscape, and irrigation. For more details, please see the detailed project description in Section 2.3 above.

9. Surrounding land uses and setting: Briefly describe the project's surroundings:

The projects surroundings are generally designated as low density residential (LDR) in the General Land Use Plan to the immediate south and east, with General Commercial (GC) located northeast and northwest of the project site. The project is located just north of the city limits with land previously disturbed for agriculture use, further south outside of the city.

10. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement.)

City of Manteca

- Adoption of the Initial Study/Mitigated Negative Declaration
- Approval of Minor Use Permit, Site Plan/Design Review/Tentative Parcel Map
- Grading and Improvement Plans
- Building Permits

San Joaquin Council of Governments

- Approval of Incidental Take Mitigation Measures

San Joaquin Valley Air Pollution Control District

- Authority to Construct/Permit to Operate

11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

The California Native American Heritage Commission was notified of the project on November 15th, 2021 and has received no response.

NOTE: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See Public Resources Code section 21080.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code section 21082.3(c) contains provisions specific to confidentiality.

4.0 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact identified as "Less Than Significant With Mitigation Incorporated" as indicated by the checklist on the following pages.

- | | | |
|--|---|---|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Greenhouse Gas Emissions | <input type="checkbox"/> Public Services |
| <input checked="" type="checkbox"/> Air Quality | <input type="checkbox"/> Hazards & Hazardous Materials | <input type="checkbox"/> Recreation |
| <input type="checkbox"/> Agricultural and Forestry Resources | <input checked="" type="checkbox"/> Hydrology/Water Quality | <input checked="" type="checkbox"/> Transportation |
| <input checked="" type="checkbox"/> Biological Resources | <input type="checkbox"/> Land Use/Planning | <input checked="" type="checkbox"/> Tribal Cultural Resources |
| <input checked="" type="checkbox"/> Cultural Resources | <input type="checkbox"/> Mineral Resources | <input type="checkbox"/> Utilities/Service Systems |
| <input type="checkbox"/> Energy | <input type="checkbox"/> Noise | <input type="checkbox"/> Wildfire |
| <input checked="" type="checkbox"/> Geology/Soils | <input type="checkbox"/> Population/Housing | <input type="checkbox"/> Mandatory Findings of Significance |

DETERMINATION:

On the basis of this initial evaluation (check one):

- ☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- ☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- ☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- ☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- ☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

CERTIFICATION:



Signature

6/28/22

Date

5.0 ENVIRONMENTAL ANALYSIS

5.1 AESTHETICS

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Issues	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
AESTHETICS. Except as provided in Public Resources Code Section 21099, would the project:				
a) Have a substantial adverse effect on a scenic vista?			X	
b) Substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway?			X	
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?			X	
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			X	

a) Have a substantial adverse effect on a scenic vista?

Less Than Significant Impact. Under CEQA, a scenic vista is defined as a viewpoint that provides expansive views of a highly valued landscape for the benefit of the public. A vista is a view from a particular location or combination of locations; a scenic vista combines an aesthetically pleasing aspect, often natural, to the vista. While a scenic vista may be formally designated, they are often informal public views. An adverse effect to a scenic vista may result from a degradation of an existing vista or the loss of access to an existing viewpoint.

As outlined in the FEIR General Plan, on clear days distant views of the Sierra Nevada Mountains to the east and The Coast Range from the west can be seen from the City of Manteca. Most days these views are obstructed due to weather conditions, and therefore the proposed project would only intermittently obstruct views on clear days. The Crossings project site is located in the southwest area within city boundaries. Locally, the Crossings project site is surrounded by agricultural fields to the south and the San Joaquin River to the west. The project would have a less than significant impact on views of the river, as the project lies on the same plane and is at a far enough distance where views would not be possible from the project site. The Crossings project

would fit in to the context of the existing development and not significantly alter the visual aesthetic of the surrounding area.

- b) *Substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway?*

Less than Significant Impact. The project site is located in a relatively flat area between SR 120, to the north, a residential neighborhood to the south, and a vacant previously disturbed lot to the east. This area does not contain any aesthetically significant trees, rock outcroppings, or historical buildings. Additionally, The Crossings project site is not located near a scenic highway, the site is located approximately 12.7 miles northeast from the nearest California Scenic Highway 580 (DOT, 2021) and therefore would cause a less than significant impact to scenic resources.

- c) *In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?*

Less Than Significant Impact. The project site is located in an urbanized area, and the project does not conflict with the General Commercial zoning district it falls within. This zoning district is described in the Cities Municipal Code as

“...provid[ing] for wholesale, warehousing, and heavy commercial uses, highway-oriented commercial retail, public and quasi-public uses, and similar and compatible uses. The designation is also intended to accommodate visitor lodging, commercial recreation and public gathering facilities, such as amphitheaters, or public gardens. It also allows most neighborhood and mixed commercial uses.”

The specific project components would be required to determine allowable use and be required to obtain correct permitting and review prior to issuance of grading permits. The proposed uses including hotel, grocery, restaurants, and vehicle service stations are all allowed under this zoning district and fit in to the overall aesthetic landscape. The project would align with the General Plan’s Circulation Goals to improve the aesthetic quality in the built environment by having curbside landscaping, proving sidewalks and bike lanes where space is available. The Crossing project site includes landscaping plans consistent City guidelines and includes maintaining landscaping and a sidewalk to meet General Plan Guidelines. The Crossing site also proposes adequate and attractive signage to update the area and alert the public to the commercial uses at the project site. The project would also comply with all additional federal, state, and local regulations governing scenic quality. Therefore, impacts are less than significant.

- d) *Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?*

Less Than Significant Impact. Due to the nature of the Project, operational hours are anticipated to be 24 hours per day/7 days per week/ 365 days per year. Excessive or inappropriately directed

lighting can adversely impact nighttime views by reducing the ability to see the night sky and stars. Glare can be caused from unshielded or misdirected lighting sources. Reflective surfaces (i.e., polished metal) can also cause glare. Impacts associated with glare range from simple nuisance to potentially dangerous situations (i.e., if glare is directed into the eyes of motorists). Existing outdoor lighting at and near the project site is associated with commercial/retail, public/institutional, and street lighting typical of suburban areas. The proposed project would generate lighting from two primary sources: lighting from building interiors that would pass through windows, and lighting from exterior sources (e.g., street lighting, vehicles, security lighting, and landscape lighting). Lighting associated with the project would not be directed towards adjacent properties across Atherton Drive toward the residential community.

The City of Manteca's Municipal code Section 15.50.060 General Lighting Standards outlines outdoor lighting standards. This includes nuisance prevention which would require all lighting to be directed downward, toward structures, and shielded to prevent glare and light pollution, maintenance, shielding which would reduce light trespass, level of illumination, max height, energy efficient fixtures, etc. The project would adhere to these standards. Further, the City would also review new lighting for conformance with the 2019 California Green Building Standards Code (CALGreen) (California Code of Regulations [CCR] Title 24 Part 11) such that only the minimum amount of lighting is used, and no light spillage occurs. The Project would adhere to the City's Municipal Code, California's Green Buildings Standards Code, and all additional federal, state, or local regulations. Therefore, resulting in a less than significant impact concerning a new source of substantial light or glare.

Cumulative Impacts

The potential aesthetic impacts related to views, aesthetics, and light and glare are site-specific. As discussed above, project-related impacts to scenic vistas would be less than significant, and the proposed project would not result in any impacts to on-site visual resources because the project would retain and enhance the visual characteristic of the site. In addition, the proposed project would also be consistent and comply with the City's land use, scenic quality and development regulations contained in the City's Municipal Code and General Plan. Lighting and sources of glare, while not always site-specific, would be consistent with the majority of the surrounding urban area and would be used during similar hours as surrounding uses. Therefore, while the proposed project in conjunction with past, present, and reasonably foreseeable development would change the appearance of the site, all development projects follow applicable local planning and design guidelines regarding roadway design including materials, coloration, and landscaping as specified in the City's Municipal Code regarding lighting standards and limitation. Therefore, aesthetic impacts are not expected to be cumulatively considerable, and impacts would be less than significant.

5.2 AGRICULTURE AND FORESTRY RESOURCES

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Issues	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
AGRICULTURE AND FORESTRY RESOURCES. In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?			X	
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?			X	
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?			X	
d) Result in the loss of forest land or conversion of forest land to non-forest use?			X	
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?			X	

- a) *Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?*

Less Than Significant Impact. The Project site is currently predominantly previously disturbed vacant land, excluding a portion of 2303 W Atherton Dr or APN 24132058, that is currently developed and under commercial use as Sterling Home Showcase. The project site is not designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance as shown

on the California Important Farmland Finder Map. Under the Farmland Mapping and Monitoring program the project site is designated Urban and Built-Up Land and therefore would have a less than significant impact.

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

Less Than Significant Impact. Refer to a) The project site is not under a Williamson Act contract and does not have existing zoning for agricultural use. Therefore, the proposed project would have a less than significant impact to zoning for agricultural use or a Williamson Act Contract.

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

Less Than Significant Impact. The project is not zoned as forest land, timberland, or timberland production and no land in the project vicinity is. Therefore, the project would not conflict or cause rezoning of any forest land (as defined in Public Resource Code section 12220(g)) timberland (as defined by Public Resources Code section 4526), or zoned Timberland Production (as defined by Government Code section 51104(g)). Therefore, impacts related to the loss of this agricultural resource are less than significant.

d) Result in the loss of forest land or conversion of forest land to non-forest use?

Less Than Significant Impact. **Refer to c)**

e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

Less Than Significant Impact. **Refer to a) and c)**

Cumulative Impacts

The proposed Project would have no impact on agricultural and forestry resources since the surrounding uses are currently used for commercial, residential, public use, and industrial purposes. Therefore, the Project would not contribute to a cumulatively considerable impact to agriculture.

5.3 AIR QUALITY

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Issues	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
AIR QUALITY. Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?			X	
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?			X	
c) Expose sensitive receptors to substantial pollutant concentrations?			X	
d) Result in other emissions (such as those leading to odors adversely affecting a substantial number of people?			X	

REGULATORY SETTING

Federal

Federal Clean Air Act

Air quality is federally protected by the Federal Clean Air Act (FCAA) and its amendments. Under the FCAA, the EPA developed the primary and secondary National Ambient Air Quality Standards (NAAQS) for the criteria air pollutants including ozone, NO₂, CO, SO₂, PM₁₀, PM_{2.5}, and lead. Depending on whether the standards are met or exceeded, the local air basin is classified as in “attainment” or “nonattainment.” Some areas are unclassified, which means no monitoring data are available. Unclassified areas are considered to be in attainment. Proposed projects in or near nonattainment areas could be subject to more stringent air-permitting requirements. The FCAA requires that each state prepare a State Implementation Plan (SIP) to demonstrate how it will attain the NAAQS within the federally imposed deadlines.

The U.S. Environmental Protection Agency (EPA) has designated enforcement of air pollution control regulations to the individual states. Applicable federal standards are summarized in *Table 1: State and Federal Ambient Air Quality Standards*.

California Air Resources Board

CARB administers California's air quality policy. The California Ambient Air Quality Standards (CAAQS) were established in 1969 pursuant to the Mulford-Carrell Act. These standards, included with the NAAQS in *Table 1*, are generally more stringent and apply to more pollutants than the NAAQS. In addition to the criteria pollutants, CAAQS have been established for visibility reducing particulates, hydrogen sulfide, and sulfates. In general, the San Joaquin County experiences low concentrations of most pollutants when compared to federal standards, except for O₃ and PM, for which standards are exceeded periodically. San Joaquin County has a State designation Attainment or Unclassified for all criteria pollutants except for ozone, PM₁₀ and PM_{2.5}. San Joaquin County has a national designation of either "Unclassified" or "Attainment" for all criteria pollutants except for Ozone and PM_{2.5}.

The California Clean Air Act (CCAA), which was approved in 1988, requires that each local air district prepare and maintain an Air Quality Management Plan (AQMP) to achieve compliance with CAAQS. These AQMPs also serve as the basis for the preparation of the SIP for meeting federal clean air standards for the State of California. Like the EPA, CARB also designates areas within California as either attainment or nonattainment for each criteria pollutant based on whether the CAAQS have been achieved. Under the CCAA, areas are designated as nonattainment for a pollutant if air quality data shows that a state standard for the pollutant was violated at least once during the previous three calendar years. Exceedances that are affected by highly irregular or infrequent events such as wildfires, volcanoes, etc. are not considered violations of a State standard, and are not used as a basis for designating areas as nonattainment. The applicable State standards are summarized in *Table 1*.

Table 1: State and Federal Ambient Air Quality Standards

Pollutant	Averaging Time	State Standards ¹		Federal Standards ²	
		Concentration	Attainment Status	Concentration ³	Attainment Status
Ozone (O ₃)	8 Hour	0.070 ppm (137 µg/m ³)	N ⁹	0.070 ppm	N ⁴
	1 Hour	0.09 ppm (180 µg/m ³)	N	NA	N/A ⁵
Carbon Monoxide (CO)	8 Hour	9.0 ppm (10 mg/m ³)	A	9 ppm (10 mg/m ³)	A ⁶
	1 Hour	20 ppm (23 mg/m ³)	A	35 ppm (40 mg/m ³)	A
Nitrogen Dioxide (NO ₂)	1 Hour	0.18 ppm (339 µg/m ³)	A	0.100 ppm ¹¹	U
	Annual Arithmetic Mean	0.030 ppm (57 µg/m ³)	-	0.053 ppm (100 µg/m ³)	A
Sulfur Dioxide ¹² (SO ₂)	24 Hour	0.04 ppm (105 µg/m ³)	A	0.14 ppm (365 µg/m ³)	A
	1 Hour	0.25 ppm (655 µg/m ³)	A	0.075 ppm (196 µg/m ³)	A
	Annual Arithmetic Mean	NA	-	0.03 ppm (80 µg/m ³)	A
	24-Hour	50 µg/m ³	N	150 µg/m ³	-U

Particulate Matter (PM ₁₀)	Annual Arithmetic Mean	20 µg/m ³	N ⁷	NA	-
Fine Particulate Matter (PM _{2.5}) ¹⁵	24-Hour	NA	-	35 µg/m ³	U/A
	Annual Arithmetic Mean	12 µg/m ³	N ⁷	12 µg/m ³	N
Sulfates (SO ₄₋₂)	24 Hour	25 µg/m ³	A	NA	-
Lead (Pb) ^{13, 14}	30-Day Average	1.5 µg/m ³	-	NA	A
	Calendar Quarter	NA	-	1.5 µg/m ³	A
	Rolling 3-Month Average	NA	-	0.15 µg/m ³	-
Hydrogen Sulfide (H ₂ S)	1 Hour	0.03 ppm (42 µg/m ³)	U	NA	-
Vinyl Chloride (C ₂ H ₃ Cl)	24 Hour	0.01 ppm (26 µg/m ³)	-	NA	-
Visibility Reducing Particles ⁸	8 Hour (10:00 to 18:00 PST)	-	U	-	-

A = attainment; N = nonattainment; U = unclassified; N/A = not applicable or no applicable standard; ppm = parts per million; µg/m³ = micrograms per cubic meter; mg/m³ = milligrams per cubic meter; – = not indicated or no information available.

1. California standards for ozone, carbon monoxide (except Lake Tahoe), sulfur dioxide (1-hour and 24-hour), nitrogen dioxide, suspended particulate matter - PM₁₀, and visibility reducing particles are values that are not to be exceeded. The standards for sulfates, Lake Tahoe carbon monoxide, lead, hydrogen sulfide, and vinyl chloride are not to be equaled or exceeded. If the standard is for a 1-hour, 8-hour or 24-hour average (i.e., all standards except for lead and the PM₁₀ annual standard), then some measurements may be excluded. In particular, measurements are excluded that CARB determines would occur less than once per year on the average. The Lake Tahoe CO standard is 6.0 ppm, a level one-half the national standard and two-thirds the state standard.
2. National standards shown are the "primary standards" designed to protect public health. National standards other than for ozone, particulates and those based on annual averages are not to be exceeded more than once a year. The 1-hour ozone standard is attained if, during the most recent three-year period, the average number of days per year with maximum hourly concentrations above the standard is equal to or less than one. The 8-hour ozone standard is attained when the 3-year average of the 4th highest daily concentrations is 0.070 ppm (70 ppb) or less. The 24-hour PM₁₀ standard is attained when the 3-year average of the 99th percentile of monitored concentrations is less than 150 µg/m³. The 24-hour PM_{2.5} standard is attained when the 3-year average of 98th percentiles is less than 35 µg/m³. Except for the national particulate standards, annual standards are met if the annual average falls below the standard at every site. The national annual particulate standard for PM₁₀ is met if the 3-year average falls below the standard at every site. The annual PM_{2.5} standard is met if the 3-year average of annual averages spatially-averaged across officially designed clusters of sites falls below the standard.
3. National air quality standards are set by the EPA at levels determined to be protective of public health with an adequate margin of safety.
4. On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm. An area will meet the standard if the fourth-highest maximum daily 8-hour ozone concentration per year, averaged over three years, is equal to or less than 0.070 ppm. EPA will make recommendations on attainment designations by October 1, 2016, and issue final designations October 1, 2017. Nonattainment areas will have until 2020 to late 2037 to meet the health standard, with attainment dates varying based on the ozone level in the area.
5. The national 1-hour ozone standard was revoked by U.S. EPA on June 15, 2005.
6. In April 1998, the Bay Area was redesignated to attainment for the national 8-hour carbon monoxide standard.
7. In June 2002, CARB established new annual standards for PM_{2.5} and PM₁₀.
8. Statewide VRP Standard (except Lake Tahoe Air Basin): Particles in sufficient amount to produce an extinction coefficient of 0.23 per kilometer when the relative humidity is less than 70 percent. This standard is intended to limit the frequency and severity of visibility impairment due to regional haze and is equivalent to a 10-mile nominal visual range.
9. The 8-hour CA ozone standard was approved by the Air Resources Board on April 28, 2005 and became effective on May 17, 2006.

10. On January 9, 2013, EPA issued a final rule to determine that the Bay Area attains the 24-hour PM_{2.5} national standard. This EPA rule suspends key SIP requirements as long as monitoring data continues to show that the Bay Area attains the standard. Despite this EPA action, the Bay Area will continue to be designated as “nonattainment” for the national 24-hour PM_{2.5} standard until such time as the Air District submits a “redesignation request” and a “maintenance plan” to EPA, and EPA approves the proposed redesignation.
11. To attain this standard, the 3-year average of the 98th percentile of the daily maximum 1-hour average at each monitor within an area must not exceed 0.100ppm (effective January 22, 2010). The US Environmental Protection Agency (EPA) expects to make a designation for the Bay Area by the end of 2017.
12. On June 2, 2010, the U.S. EPA established a new 1-hour SO₂ standard, effective August 23, 2010, which is based on the 3-year average of the annual 99th percentile of 1-hour daily maximum concentrations. The existing 0.030 ppm annual and 0.14 ppm 24-hour SO₂ NAAQS however must continue to be used until one year following U.S. EPA initial designations of the new 1-hour SO₂ NAAQS.
13. CARB has identified lead and vinyl chloride as ‘toxic air contaminants’ with no threshold level of exposure below which there are no adverse health effects determined.
14. National lead standard, rolling 3-month average: final rule signed October 15, 2008. Final designations effective December 31, 2011.
15. In December 2012, EPA strengthened the annual PM_{2.5} National Ambient Air Quality Standards (NAAQS) from 15.0 to 12.0 micrograms per cubic meter (µg/m³). In December 2014, EPA issued final area designations for the 2012 primary annual PM_{2.5} NAAQS. Areas designated “unclassifiable/attainment” must continue to take steps to prevent their air quality from deteriorating to unhealthy levels. The effective date of this standard is April 15, 2015.

Source: Bay Area Air Quality Management District, *Air Quality Standards and Attainment Status*, 2017 <http://www.baaqmd.gov/research-and-data/air-quality-standards-and-attainment-status>.

Regional

San Joaquin Valley Air Pollution Control District (SJVAPCD)

The proposed Project lies within the northern portion of the San Joaquin Valley Air Basin (SJVAB). The San Joaquin Valley Air Pollution Control District (SJVAPCD) has jurisdiction over most air quality matters in the SJVAB and is tasked with implementing programs and regulations required by the federal and State Clean Air Acts. If a project is found to interfere with the region’s ability to comply with federal and State air quality standards, local governments then need to consider project modifications or provide mitigation measures to eliminate the inconsistency of the project plans. In order for a project to be considered “consistent” with the latest Air Quality Plan (AQP), the project must be consistent with the goals, objectives, and assumptions in the respective plan to achieve Federal and State air quality standards. Additionally, both construction-related and long-term emissions are required to be quantified and compared to the SJVAPCD significance thresholds.

Clean Air Plan

Air quality plans developed to meet federal requirements are referred to as State Implementation Plans. The federal and state Clean Air Acts require plans to be developed for areas designated as nonattainment (with the exception of areas designated as nonattainment for the state PM₁₀ standard). The SJVAQMD is responsible for developing a Clean Air Plan, which guides the region’s air quality planning efforts to attain the CAAQS. The SJVAQMD adopted the 2022 Ozone Plan and 2018 PM 2.5 Plan.

SJVAQMD periodically develops air quality plans that outline the regional strategy to improve air quality and protect the climate. The most recent plan, 2018 Plan for the 1997, 2006, and 2012 PM 2.5 Standards, includes a wide range of control measures designed to reduce emissions of air pollutants and GHGs.

Local*City of Manteca Municipal Code*

Chapter 17.58 of the Manteca Municipal Code describes the odor, particulate matter, and air containment standards (consistent with the rules and regulations of the SJVAPCD and the California Health and Safety Code). Chapter 15.62 of the Municipal Code provides expedited permitting procedures for electric vehicle charging stations. Furthermore, Chapter 15.60 describes the solar energy system requirements associated with small residential rooftop solar energy systems within the City.

City of Manteca General Plan

The Manteca General Plan Update includes the following policies intended to control or reduce air pollution impacts:

- AQ-P-1:** Cooperate with other agencies to develop a consistent and coordinated approach to reduction of air pollution and management of hazardous air pollutants.
- AQ-P-7:** New construction will be managed to minimize fugitive dust and construction vehicle emissions.
- AQ-P-9:** Burning of any combustible material within the City will be controlled to minimize particulate air pollution.
- AQ-I-1:** Work with the San Joaquin Valley Air Pollution Control District (APCD) to implement the Air Quality Management Plan (AQMP).
- Cooperate with the APCD to develop consistent and accurate procedures for evaluating project-specific and cumulative air quality impacts.
 - Cooperate with the APCD and the California Air Resources Board in their efforts to develop a local airshed model.
 - Cooperate with the APCD in their efforts to develop a cost/benefit analysis of possible control strategies (mitigation measures to minimize short and long-term stationary and area source emissions as part of the development review process, and monitoring measures to ensure that mitigation measures are implemented.
- AQ-I-2:** In accordance with CEQA, submit development proposals to the APCD for review and comment prior to decision.

THRESHOLDS

The City of Manteca, including the project site, is located within the northern portion of the San Joaquin Valley Air Basin (Basin) and is within the jurisdictional boundaries of the San Joaquin Valley Air Pollution Control District (SJVAPCD). The SJVAB area is currently designated as a non-attainment area for the State and federal ozone, State and federal particulate matter 2.5 microns in diameter (PM_{2.5}), and State particulate matter 10 microns in diameter (PM₁₀) standards. The SJVAB is designated attainment or

unclassified for all other ambient air quality standards (AAQS). It should be noted that although the U.S. Environmental Protection Agency (EPA) revoked their 1-hour ozone standard in 2005, in May of 2016, the EPA proposed findings that the SJVAB was in attainment of the 1-hour ozone standard.

In compliance with regulations, due to the non-attainment designations of the area, the SJVAPCD periodically prepares and updates air quality plans that provide emission reduction strategies to achieve attainment of the AAQS, including control strategies to reduce air pollutant emissions through regulations, incentive programs, public education, and partnerships with other agencies. The most recent ozone plan is the 2016 Ozone Plan for the 2008 8-Hour Ozone Standard, which was adopted by the SJVAPCD on June 16, 2016. The California Air Resources Board (CARB) subsequently conducted a public meeting to consider approval of the 2016 Ozone Plan for the 2008 8-Hour Ozone Standard and approved the plan on July 21, 2016. Additionally, the most recent federal attainment plan for PM is the 2016 Plan for the 1997 PM_{2.5} Standard, which was approved by the District Governing Board on April 16, 2015.

The aforementioned air quality plans contain mobile source controls, stationary source controls, and transportation control measures (TCMs) to be implemented in the region to attain the State and federal standards within the SJVAB. Adopted SJVAPCD rules and regulations, as well as the thresholds of significance, have been developed with the intent to ensure continued attainment of AAQS, or to work towards attainment of AAQS for which the area is currently designated non-attainment, consistent with applicable air quality plans. The SJVAPCD has established broad significance thresholds associated with the construction and operation emissions for various criteria pollutants including ozone precursors such as reactive organic gases (ROG) and oxides of nitrogen (NO_x), as well as for PM₁₀, PM_{2.5}, sulfur oxide (SO_x), and carbon monoxide (CO) expressed in tons per year. Thus, by exceeding the SJVAPCD's mass emission thresholds for operational emissions of ROG, NO_x, PM₁₀, PM_{2.5}, SO_x, or CO a project would be considered to conflict with or obstruct implementation of the SJVAPCD's air quality planning efforts. The SJVAPCD's adopted thresholds of significance for criteria pollutant emissions are presented in *Table 2: SJVAPCD Criteria Pollutant Thresholds of Significance*. If the proposed project's emissions exceed the applicable thresholds of significance presented in the table, the project could violate an air quality standard, contribute to an existing or projected air quality violation or conflict with or obstruct implementation of the applicable air quality plans.

Table 2: SJVAPCD Criteria Pollutant Thresholds of Significance

Criteria Air Pollutants and Precursors (Regional)	Construction-Related	Operational-Related
	Average Annual Emissions (tons/year)	Annual Average Emission (tons/year)
Reactive Organic Gases (ROG)	10	10
Nitrogen Oxides (NO _x)	10	10
Carbon Monoxide (CO)	100	100
Sulfur Oxides (SO _x)	27	27
Coarse Particulates (PM ₁₀)	15	15
Fine Particulates (PM _{2.5})	15	15

Source: SJVAPCD, March 19, 2015.

ENVIRONMENTAL IMPACTS*a) Conflict with or obstruct implementation of the applicable air quality plan?*

Less Than Significant Impact. The SJVAPCD is tasked with implementing programs and regulations required by the Federal Clean Air Act and the California Clean Air Act. In that capacity, the SJVAPCD has prepared plans to attain Federal and State ambient air quality standards. To achieve attainment with the standards, the SJVAPCD has established thresholds of significance for criteria pollutant emissions in their SJVAPCD Guidance for Assessing and Mitigating Air Quality Impacts (2015). Projects with emissions below the thresholds of significance for criteria pollutants would be determined to “Not conflict or obstruct implementation of the District’s air quality plan”. As discussed in Threshold AQ-2 below, the project would not exceed any SJVAPCD Criteria Pollutant Thresholds during construction or operations. Therefore, the project would not conflict with or delay the implementation of SJVAPCD attainment plans and would result in a less than significant impact.

b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

Less Than Significant Impact.

Construction Emissions

Project construction activities would generate short-term emissions of criteria air pollutants. The criteria pollutants of primary concern within the project area include ozone-precursor pollutants (i.e., ROG and NO_x) and PM₁₀ and PM_{2.5}. Construction-generated emissions are short term and temporary, lasting only while construction activities occur, but would be considered a significant air quality impact if the volume of pollutants generated exceeds the SJVAPCD’s thresholds of significance.

Construction results in the temporary generation of emissions during demolition, site preparation, site grading, road paving, motor vehicle exhaust associated with construction equipment and worker trips, and the movement of construction equipment, especially on unpaved surfaces. Emissions of airborne particulate matter are largely dependent on the amount of ground disturbance associated with site preparation activities, as well as weather conditions and the appropriate application of water. For this project, site preparation includes the excavation and removal of previously identified contaminated soils.

The duration of construction activities associated with the project are estimated to last approximately 16 months, beginning in August 2022 and concluding at the end of December 2023. The project’s construction-related emissions were calculated using the SJVAPCD-approved CalEEMod computer program, which is designed to model emissions for land use development projects, based on typical construction requirements. Project demolition and site preparation are anticipated to begin in August 2022 and last approximately one month. Project grading and

construction is anticipated to begin in September 2022 and last approximately 10 months. The project would include approximately 32,700 cubic yards (cy) of balanced cut and fill on site. Paving and Architectural Coating were modeled to be completed December 2023. The exact construction timeline is unknown; however, to be conservative, earlier dates were utilized in the modeling. This approach is conservative given that emissions factors decrease in future years due to regulatory and technological improvements and fleet turnover. See Appendix A: Air Quality Modeling Data for additional information regarding the construction assumptions used in this analysis. The project's predicted maximum daily construction-related emissions are summarized in *Table 3: Construction-Related Emissions*.

Table 3: Construction-Related Emissions

Construction Year	Pollutant (maximum tons per year) ¹					
	Reactive Organic Gases (ROG)	Nitrogen Oxides (NO _x)	Carbon Monoxide (CO)	Sulfur Oxides (SO _x)	Coarse Particulate Matter (PM ₁₀)	Fine Particulate Matter (PM _{2.5})
Project Emissions						
2022	0.17	1.61	1.36	0.00	0.23	0.13
2023	2.34	2.32	2.85	0.01	0.09	0.16
Maximum	2.34	2.32	2.85	0.01	0.23	0.16
<i>SJVAPCD Significance Threshold²</i>	<i>10</i>	<i>10</i>	<i>100</i>	<i>27</i>	<i>15</i>	<i>15</i>
Exceed BAAQMD Threshold?	No	No	No	No	No	No
1. These emissions reflect CalEEMod "mitigated" output, which accounts for compliance with SJVAPCD's Rule 9510 (Indirect Source Review) and implementation of the project's fugitive dust control strategies, including watering of the project site and unpaved roads three times per day, and restricting vehicle speed on unpaved roads to 15 miles per hour. 2. SJVAPCD, August 2015. Source: Refer to the CalEEMod outputs provided in Appendix A.						

Fugitive Dust Emissions. Fugitive dust emissions are associated with land clearing, ground excavation, cut-and-fill operations, demolition, and truck travel on unpaved roadways. Dust emissions also vary substantially from day to day, depending on the level of activity, the specific operations, and weather conditions. Fugitive dust emissions may have a substantial, temporary impact on local air quality. In addition, fugitive dust may be a nuisance to those living and working in the project vicinity. Uncontrolled dust from construction can become a nuisance and potential health hazard to those living and working nearby. Pursuant to Regulation VIII, Rule 9510, the project would be required to develop, prepare, submit, obtain approval of, and implement a dust control plan, which would reduce fugitive dust impacts to less than significant for project construction.

Construction Equipment and Worker Vehicle Exhaust. Exhaust emission factors for typical diesel-powered heavy equipment are based on the CalEEMod program defaults. Variables factored into

estimating the total construction emissions include: level of activity, length of construction period, number of pieces/types of equipment in use, site characteristics, weather conditions, number of construction personnel, and the amount of materials to be transported onsite or offsite. Exhaust emissions from construction activities include emissions associated with the transport of machinery and supplies to and from the project site, emissions produced on site as the equipment is used, and emissions from trucks transporting materials and workers to and from the site. Emitted pollutants would include ROG, NO_x, PM₁₀, and PM_{2.5}. As detailed in *Table 3*, project construction emissions would not the SJVAPCD thresholds and construction emissions would not result in a potentially significant impact. Therefore, construction air quality impacts would be less than significant.

ROG Emissions. In addition to gaseous and particulate emissions, the application of asphalt and surface coatings creates ROG emissions, which are O₃ precursors. In accordance with the methodology prescribed by the SJVAPCD, the ROG emissions associated with paving have been quantified with CalEEMod.

The highest concentration of ROG emissions would be generated from architectural coating beginning in September 2023 and lasting approximately four months. This phase includes the interior and exterior painting as well as striping of all paved parking areas and driveways. Paints would be required to comply with SJVAPCD's Rule 4601 (Architectural Coatings) and limit the amount of ROG emissions from cutback asphalt in compliance with the requirements of SJVAPCD's Rule 4641 (Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations).

Summary. As shown in *Table 3*, all criteria pollutant emissions would remain below their respective thresholds. As such, the proposed project's construction would not worsen ambient air quality, create additional violations of federal and state standards, or delay the Basin's goal for meeting attainment standards. Impacts would be less than significant.

Operational Emissions

Operational emissions for industrial developments are typically generated from mobile sources (burning of fossil fuels in cars); energy sources (cooling and heating); and area sources (landscape equipment and household products). *Table 4: Project Operational Emissions* shows that the project's maximum emissions would not exceed SJVAPCD operational thresholds.

Table 4: Project Operational Emissions

Emissions Source	Pollutant (maximum tons per year) ¹					
	Reactive Organic Gases (ROG)	Nitrogen Oxides (NO _x)	Carbon Monoxide (CO)	Sulfur Oxides (SO _x)	Coarse Particulate Matter (PM ₁₀)	Fine Particulate Matter (PM _{2.5})
Proposed Project						
Area	1.34	0.00	0.00	0.00	0.00	0.00
Energy	0.05	0.41	0.35	0.00	0.03	0.03

Emissions Source	Pollutant (maximum tons per year) ¹					
	Reactive Organic Gases (ROG)	Nitrogen Oxides (NO _x)	Carbon Monoxide (CO)	Sulfur Oxides (SO _x)	Coarse Particulate Matter (PM ₁₀)	Fine Particulate Matter (PM _{2.5})
Mobile	4.13	4.68	28.55	0.05	4.82	1.32
Gas Dispensing Facility	4.15	0.00	0.00	0.00	0.00	0.00
Total Project Emissions	9.67	5.09	28.90	0.05	4.85	1.35
<i>SJVAPCD Significance Threshold²</i>	<i>10</i>	<i>10</i>	<i>100</i>	<i>27</i>	<i>15</i>	<i>15</i>
SJVAPCD Threshold Exceeded?	No	No	No	No	No	No
1. Emissions were calculated using CalEEMod.						
3. SJVAPCD, 2015.						
Source: Refer to the CalEEMod outputs provided in Appendix A, Air Quality Modeling Data.						

Area Source Emissions. Area source emissions would be generated due to the use consumer products, architectural coating, and landscaping.

Energy Source Emissions. Energy source emissions would be generated as a result of electricity and natural gas usage associated with the project. The primary use of electricity and natural gas by the project would be for space heating and cooling, water heating, ventilation, lighting, appliances, and electronics.

Mobile Source Emissions. Mobile sources are emissions from motor vehicles, including tailpipe and evaporative emissions. Depending upon the pollutant being discussed, the potential air quality impact may be of either regional or local concern. For example, ROG, NO_x, PM₁₀, and PM_{2.5} are all pollutants of regional concern (NO_x and ROG react with sunlight to form O₃ [photochemical smog], and wind currents readily transport PM₁₀ and PM_{2.5}). However, CO tends to be a localized pollutant, dispersing rapidly at the source. Project-generated vehicle emissions have been estimated using CalEEMod. Trip generation rates associated with the project were based on the Project Transportation Analysis prepared by TJKM (2022). Based on the Transportation Analysis, the project would result in a gross total of 12,160 daily vehicle trips. However, with applicable trip reductions including location-based mode-share the project would result in 10,944 net new trips.

Gasoline Dispensing Facility. The proposed project includes one (1) 22-position gasoline dispensing facility (GDF) and GDFs are regulated by the SJVAPCD. Because GDFs require permits from the Air District, emissions attributed to the GDF were estimated separately from the area source operational emissions above. The emissions calculations are based on annual daily throughput of 19,008 gallons of gasoline (approximately 6.937 million gallons per year) and 43,712 gallons of diesel (approximately 15.945 million gallons per year). In addition to traffic-related emissions, the GDF is also a source of ROG emissions associated with loading, storage, refueling of vehicles and spillage that results in evaporative emissions. *Table 4* also presents the evaporative ROG emissions

associated with the proposed GDF. As shown in *Table 4*, the ROG emissions from the proposed GDF would not result in an exceedance of the SJVAPCD's applicable significance thresholds.

Total Operational Emissions. As seen in *Table 4*, net project operational emissions would not exceed SJVAPCD thresholds. As noted above, the SJVAPCD has set its CEQA significance threshold based on the trigger levels for the federal NSR Program. The NSR Program was created to ensure projects are consistent with attainment of health-based federal ambient air quality standards. The federal ambient air quality standards establish the levels of air quality necessary, with an adequate margin of safety, to protect the public health. Therefore, the project would not violate any air quality standards or contribute substantially to an existing or projected air quality violation and no criteria pollutant health impacts would occur. Project operational emissions would be less than significant.

Emergency Backup Generators. Another potential source of operational emissions is stationary equipment such as diesel engines used to power emergency back-up generators. Stationary sources would be subject to SJVAPCD rules and regulations and could require permits from SJVAPCD. The SJVAPCD's permitting process requires the purchase of emission reduction credits (ERC) for any criteria pollutant exceeding the SJVAPCD's New Source Review (NSR) offset requirements. NSR offset requirements provide the basis for the SJVAPCD CEQA thresholds of significance. As such, sources of stationary air pollutant emissions will be required to comply with all applicable SJVAPCD regulations. Therefore, a less than significant impact would occur with regard to stationary equipment emissions.

Cumulative Short-Term Emissions

The SJVAB is designated nonattainment for O₃, PM₁₀, and PM_{2.5} for State standards and nonattainment for O₃ and PM_{2.5} for Federal standards. discussed above, the project's construction-related emissions would not have the potential to exceed the SJVAPCD significance thresholds for criteria pollutants.

Since these thresholds indicate whether an individual project's emissions have the potential to affect cumulative regional air quality, it can be expected that the project-related construction emissions would not be cumulatively considerable. The SJVAPCD recommends consistency Regulation VIII for all projects whether or not construction-related emissions exceed the thresholds of significance. Compliance with SJVAPCD construction-related mitigation requirements is considered to reduce cumulative impacts at a Basin-wide level. As a result, construction emissions associated with the project would not result in a cumulatively considerable contribution to significant cumulative air quality impacts.

Cumulative Long-Term Impacts

The SJVAPCD has not established separate significance thresholds for cumulative operational emissions. The nature of air emissions is largely a cumulative impact. As a result, no single project

is sufficient in size, by itself, to result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. The SJVAPCD developed the operational thresholds of significance based on the level above which a project's individual emissions would result in a cumulatively considerable contribution to the Basin's existing air quality conditions. Therefore, a project that exceeds the SJVAPCD operational thresholds would also be a cumulatively considerable contribution to a significant cumulative impact.¹

As shown in *Table 4*, the project's operational emissions would not exceed SJVAPCD thresholds. As a result, operational emissions associated with the project would not result in a cumulatively considerable contribution to significant cumulative air quality impacts.

c) *Expose sensitive receptors to substantial pollutant concentrations?*

Less Than Significant Impact. Sensitive land uses are defined as facilities or land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Examples of these sensitive receptors are residences, schools, hospitals, and daycare centers. The nearest sensitive receptors to the project site include single-family residences approximately 100 feet to the west along Atherton Drive.

Construction Toxic Air Contaminants

Construction equipment and associated heavy-duty truck traffic generates diesel exhaust which is a known Toxic Air Contaminants (TAC). Diesel exhaust from construction equipment operating at the site poses a health risk to nearby sensitive receptors. However, the use of diesel-powered construction equipment would be episodic and would occur in various phases throughout the project site. Construction is subject to and would comply with California regulations (e.g., California Code of Regulations, Title 13, Division 3, Article 1, Chapter 10, Sections 2485 and 2449), which reduce DPM and criteria pollutant emissions from in-use off-road diesel-fueled vehicles and limit the idling of heavy-duty construction equipment to no more than five minutes. These regulations would further reduce nearby sensitive receptors' exposure to temporary and variable DPM emissions.

The duration of construction activities for the project is estimated to take approximately 16 months. Construction-related activities would result in project-generated emissions of DPM from the exhaust of off-road, heavy-duty diesel equipment for demolition, site preparation (e.g., clearing, grading); paving; application of architectural coatings; on-road truck travel; and other miscellaneous activities. For construction activity, DPM is the primary toxic air contaminant of concern. On-road diesel-powered haul trucks traveling to and from the construction area to deliver materials and equipment are less of a concern because they would not stay on the site for long durations. Diesel exhaust from construction equipment operating at the site poses a health risk to nearby sensitive receptors. The nearest sensitive receptors include single-family residences located approximately 100 feet to the west of the project site.

¹ In developing thresholds of significance for air pollutants, BAAQMD considered the emission levels for which a project's individual emissions would be cumulatively considerable. If a project exceeds the identified significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions (BAAQMD CEQA Guidelines page 2-1).

PM₁₀ construction emissions rates in grams per second were calculated from the total annual mitigated on-site exhaust emissions reported in CalEEMod (a maximum of 0.07 tons per year)² during construction. Annual emissions were converted to grams per second and these emissions rates were input into the U.S. EPA AERMOD dispersion model. AERMOD is a steady-state, multiple-source, Gaussian dispersion model designed for use with emission sources situated in terrain where ground elevations can exceed the stack heights of the emission sources (not a factor in this case). AERMOD requires hourly meteorological data consisting of wind vector, wind speed, temperature, stability class, and mixing height. Surface and upper air meteorological data was provided by the SJVAPCD. On-site construction emissions were represented in the model via an area source covering the entire project site. The locations of the AERMOD modeled sources and receptors are graphically shown in Appendix B.

As noted above, maximum (worst case) PM₁₀ exhaust construction emissions over the entire construction period were used in AERMOD to approximate construction DPM emissions. Risk levels were calculated based on the California Office of Environmental Health Hazard Assessment (OEHHA) guidance document, Air Toxics Hot Spots Program Risk Assessment Guidelines (February 2015). Results of this assessment are summarized in *Table 5: Construction Risk Assessment Results*.

Table 5: Construction Risk Assessment Results

Exposure Scenario	Pollutant Concentration (µg/m ³) ¹	Maximum Cancer Risk (Risk per Million)	Chronic Noncancer Hazard	Acute Noncancer Hazard
Construction	0.03	11.12	0.006	0.8
<i>SJVAPCD Threshold</i>	<i>N/A</i>	<i>20</i>	<i>1.0</i>	<i>1.0</i>
Threshold Exceeded?	No	No	No	No
Notes:				
1. The maximum concentration for residential uses approximately 100 feet to the west is reported.				
Source: Refer to Appendix A: Air Quality Modeling Data for AERMOD inputs, outputs, and risk calculations.				

Results of this assessment indicate that the maximum concentration of PM₁₀ during construction would be 0.03 µg/m³ and resultant cancer risk of 11.12 in one million, which would not exceed the SJVAPCD threshold of 20 in one million. Non-cancer hazards for DPM would be below SJVAPCD threshold of 1.0, with a chronic hazard index computed at 0.006 and an acute hazard index of 0.8. Additionally, construction is subject to and would comply with California regulations (e.g., California Code of Regulations, Title 13, Sections 2485 and 2449), which reduce diesel PM and criteria pollutant emissions from in-use off-road diesel-fueled vehicles and limit the idling of heavy-duty construction equipment to no more than five minutes. These regulations would further reduce nearby sensitive receptors' exposure to temporary and variable DPM emissions. Given the temporary and intermittent nature of construction activities likely to occur within specific locations in the project site (i.e., construction is not likely to occur in any one location for an extended time), the dose of DPM of any one receptor is exposed to would be limited. A less than significant impact would occur in this regard.

² The modeled on- and off-site emissions include implementation of SJVAPCD Regulation VIII, Fugitive Dust.

Operational Toxic Air Contaminants

According to the *Manteca Retail Site Preliminary Traffic Study* (TJKM, February 22, 2022) (Project Traffic Study) prepared of the project, the project is anticipated to generate approximately 10,944 net daily vehicle trips, including heavy truck trips to the proposed grocery store and gas station and would be the most prominent sources of DPM during project operations. As shown in *Table 6: Operational Risk Assessment Results*, the highest calculated carcinogenic risk resulting from the project is 16.44 per million residents, which is below the SJVAPCD threshold of 20 per million. Acute and chronic hazards also would be below the SJVAPCD significance threshold of 1.0. Operational impacts from DPM would be less than significant.

Table 6: Operational Risk Assessment Results

Exposure Scenario	Pollutant Concentration ($\mu\text{g}/\text{m}^3$) ¹	Maximum Cancer Risk (Risk per Million)	Chronic Noncancer Hazard	Acute Noncancer Hazard
Particulate Matter (PM ₁₀)	0.019	16.44	0.004	0.11
<i>Threshold</i>	<i>20</i>	<i>20</i>	<i>1.0</i>	<i>1.0</i>
Exceed Threshold?	No	No	No	No
1. The maximum concentration for residential uses approximately 100 feet to the west is reported.				
Source: Refer to Appendix A: Air Quality Modeling Data for AERMOD inputs, outputs, and risk calculations.				

Carbon Monoxide Hotspots

The primary mobile-source criteria pollutant of local concern is carbon monoxide. Concentrations of CO are a direct function of the number of vehicles, length of delay, and traffic flow conditions. Transport of this criteria pollutant is extremely limited; CO disperses rapidly with distance from the source under normal meteorological conditions. Under certain meteorological conditions, however, CO concentrations close to congested intersections that experience high levels of traffic and elevated background concentrations may reach unhealthy levels, affecting nearby sensitive receptors. Areas of high CO concentrations, or “hot spots,” are typically associated with intersections that are projected to operate at unacceptable levels of service during the peak commute hours. CO concentration modeling is therefore typically conducted for intersections that are projected to operate at unacceptable levels of service during peak commute hours.

Although the SJVAPCD has not established a specific numerical screening threshold for CO impacts, the Bay Area Air Quality Management District (BAAQMD) has established that CO impacts may be determined to be less than significant if a project would not increase traffic volumes at local intersections to more than 44,000 vehicles per hour, or 24,000 vehicles per hour for locations in heavily urban areas, where “urban canyons” formed by buildings tend to reduce air circulation. Traffic would increase along surrounding roadways during long-term operational activities.

According to the Project Traffic Study (2022), the project would generate approximately 10,944 net new daily trips. The project’s effects to existing vehicle distribution and travel speeds would be nominal. Therefore, the project would not involve intersections with more than 24,000 or 44,000 vehicles per hour. As a result, the project would not have the potential to create a CO hotspot and impacts would be less than significant.

- d) *Result in other emissions (such as those leading to odors adversely affecting a substantial number of people?)*

Less Than Significant Impact.

Construction

According to the SJVAPCD, land uses associated with odor complaints typically include wastewater treatment plants, landfills, confined animal facilities, composting stations, food manufacturing plants, refineries, and chemical plants. The project does not include any uses identified by the SJVAPCD as being associated with odors.

Construction activities associated with the project may generate detectable odors from heavy duty equipment (i.e., diesel exhaust), as well as from architectural coatings and asphalt off-gassing. Odors generated from the referenced sources are common in the man-made environment and are not known to be substantially offensive to adjacent receptors. Any construction-related odors would be short-term in nature and cease upon project completion. As a result, impacts to existing adjacent land uses from construction-related odors would be short-term in duration and therefore would be less than significant.

Operational

The proposed project is not anticipated to generate odors. Moreover, the project is not located in the vicinity of any existing or planned land uses that would be considered major sources of odors. Nonetheless, the project would be subject to the SJVAPCD's Rule 4102, which allows members of the public to submit complaints regarding odor. Impacts would be less than significant.

Cumulative Impacts

The SJVAPCD does not include separate significance thresholds for cumulative operational emissions. As discussed in Threshold AQ-2 above, the project would not exceed the any SJVAPCD Criteria Pollutant Thresholds during construction or operations. Therefore, the project would not conflict with or delay the implementation of SJVAPCD attainment plans and would result in a less than significant threshold. The SJVAPCD notes that the nature of air emissions is largely a cumulative impact. As a result, no single project is sufficient in size by itself to result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. Consistency with the SJVAPCD control measures would ensure that the project would not cumulatively contribute to air quality impacts in the Basin. Therefore, the project's cumulative contribution of air quality emissions would be less than significant, and the project's cumulative air quality impacts would also be less than cumulatively considerable.

5.4 BIOLOGICAL RESOURCES

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Issues	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
BIOLOGICAL RESOURCES. Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?		X		
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?			X	
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological?			X	
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?		X		
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?			X	
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?		X		

- a) *Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?*

Less Than Significant With Mitigation Incorporated. Special-status species includes plant and/or wildlife species that are legally protected under the federal Endangered Species Act, the California Endangered Species Act, or other regulations, or are considered rare enough by the scientific community and trustee agencies to warrant special consideration.

The project is in an urban area with substantial existing development. This includes SR 120 to the north, residential uses south, and additional commercial uses in the local vicinity. In addition, a portion of the site has existing development and the remaining areas have been previously disturbed with no native vegetation. Therefore, the site is not expected to support substantial plant and wildlife beyond what currently exists. A previous biological survey performed on the project site in conjunction with the San Joaquin Council of Governments (SJCOG) identified potential impacts on Swainson's Hawk, western burrowing owl, and other migratory birds (See Appendix C for the SJCOG's Advisory Statements on the project sites San Joaquin County Multispecies Habitat Conservation & Open Space Plan conditions (SJMSCP)). Due to lack of suitable habitat, no special-status plant species are expected to occur. While The Crossings area may have provided habitat for special-status wildlife species at some time in the past, historical farming and urban development have substantially modified natural habitats in the greater project vicinity. Nonetheless the project site contains potentially suitable habitat for both Swainson's Hawk and burrowing owl; therefore, the project could have potentially significant impacts on these species.

The project site has been determined by the SJCOG to fall within a Category A – No Pay Zone, which exempts the project from paying SJMSCP fees. The project site falls under this category because it is classified as Urban Habitat by the SJCOG and the conversion of open space has already occurred. Although the project would not be required to pay SJMSCP fees, the project would need to participate in the SJMSCP, as required by City policy and specified in the mitigation measure below. See Appendix D for the Certificate of Payment for The Crossings Project site. The SJMSCP contains Incidental Take Minimization Measures (ITMMs) for both Swainson's Hawk and burrowing owl. Implementation of Mitigation Measure BIO-1 would reduce project impacts on special-status species to a level that would be less than significant.

MM BIO-1: The developer shall mitigate for the proportionate loss of potential wildlife habitat from the project site by applying for coverage and implementing Incidental Take Minimization Measures (ITMMs) as required by the adopted San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP).

- b) *Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?*

Less than Significant Impact. As there are no streams on or near the project site, there is no riparian habitat. Additionally, the US Fish and Wildlife Service did not identify any other sensitive natural communities on the National Wetlands Mapper Inventory. The project would have a less than significant impact on these habitats.

- c) *Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological?*

Less Than Significant Impact. As identified from the US Fish and Wildlife National Wetlands Mapper, there are no identified state or federally protected wetlands mapped within The Crossings project site. Therefore, there is a less than significant impact.

- d) *Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?*

Less Than Significant With Mitigation Incorporated. As noted, there are no streams on or near the project site. The project site is not a known wildlife migration corridor and is unlikely to be one, given its location amid urban development. However, the project site contains trees around the perimeter of the site and within the previously developed portion of the site, that could be used by raptors and other migratory birds during their nesting seasons. If these trees are removed during nesting seasons for these birds, this could have a direct, adverse impact. However, with the implementation of MM BIO-2, impacts would be reduced to a level that would be less than significant.

MM BIO-2: In the event trees need to be removed or trimmed to facilitate the project, they should be felled or trimmed outside of the general bird nesting season (February 1 through August 31). If not, the developer shall have a nesting bird survey conducted immediately prior to tree trimming or removal. If active nests are found, tree felling, or trimming shall be delayed until the young have fledged.

- e) *Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*

Less than Significant Impact. Potentially applicable local requirements are the City's Street Tree Ordinance and the Street Tree Plan. There are trees within the public right-of-way, located along the perimeter of the project site. The treatment of these trees would comply with the City of Manteca's Tree and Shrub Ordinance, located in Chapter 12.08 of the Municipal Code. Any existing trees removed within the public right of way, would be replaced on-site within an approved landscape plan, that is consistent with the City's tree replacement and removal schedule, as

shown in Chapter 17.48.060.D. Therefore, the project would have a less than significant impact on local biological requirements.

f) *Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?*

Less Than Significant With Mitigation Incorporated. The San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP) is a multi-species, multi-habitat, multi-purpose open space management program for all of San Joaquin County. The Manteca City Council adopted the SJMSCP (Resolution #R2001-46) on February 5, 2001, signing a Joint Powers Agreement with other City, County, State, and Federal agencies. The SJMSCP is a 50-year Plan (2001 – 2051) that provides compensation for the conversion of open space to non-open space uses which affect the plant, fish, and wildlife species covered by the Plan. The Plan also includes some compensation to offset the impacts of open space conversions on non-wildlife related resources such as recreation, agriculture, scenic values, and other beneficial open space. The SJMSCP provides three compensation methods: preservation of existing sensitive lands, creation of new comparable habitat on the project site, or payment of fees that would be used to secure preserve lands outside the project site. In addition to fee payments, the SJMSCP identifies and requires the applicants to abide by Incidental Take Minimization Measures (ITMMs), which are protection measures that avoid direct impacts of development on special-status species (SJCOG 2000). The SJCOG implements the SJMSCP on a project-by-project basis. The City of Lathrop is a participant in the SJMSCP. As previously mentioned, the project site is within Category A – No Pay Zone, which exempts the project from SJMSCP fees.

As discussion in Impact a) above, the project would implement MM BIO-1, which would require compliance with the SJMSCP, including implementation of any applicable Incidental Take Minimization Measures. No other habitat conservation plans apply to the project site and the project would not conflict with the SJMSCP with the implementation of MM BIO-1.

Cumulative Impacts

Overall, the project is a previously disturbed with existing development located within an urban environment. To the north of the site is SR 120 and to the south is residential uses. The surrounding area has been historically modified from agricultural uses and then further commercial development. Therefore, the development of The Crossings project site would not be cumulatively considerable. In addition, the site is not located within a known habitat corridor and does not contain any riparian habitat, federally protected wetlands, or other sensitive natural communities. Though the project is located within the SJMSCP, it would comply with all policies, fees, and mitigation measures associated. Therefore, overall, with the above mentioned implementation the project would have a less than significant impact on biological resources.

5.5 CULTURAL RESOURCES

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Issues	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
CULTURAL RESOURCES. Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to in § 15064.5?			X	
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?		X		
c) Disturb any human remains, including those interred outside of dedicated cemeteries?			X	

a) *Cause a substantial adverse change in the significance of a historical resource pursuant to in § 15064.5?*

Less Than Significant Impact. A Cultural Resources Study for The Crossings Project site was conducted by Rincon Consultants, Inc. on February 2022 (Appendix E). Historical resources findings were supported by CHRIS records search, background research, a review of historical topographic and aerial imagery, a Sacred Land File Search, and a pedestrian survey. From the CHRIS records search of the 34 resources within 1-mile, none were recorded within the project site. One resource was located adjacent to the project site running along Airport Way. However, the resource is a transmission line and is ineligible for listing in the NRHP and CRHR as it has been deemed insignificant. In addition to this, 29 cultural resource studies were found within 1 mile of the project site. Of these, two included a portion of the project site. Neither of the studies identified any cultural resources on site. They both listed the closest cultural resources being the Rustic School, 0.80 miles south, and a historic-age farmhouse, 1 mile southeast. From the review of historical topographic maps, several livestock/farming buildings were located along Airport Way through the 1980's. The pedestrian survey conducted, confirmed no remnants of these buildings remained. Additional findings were seven concrete structures presumable related to irrigation activities. These structures, according to the FHWA Section 10 Programmatic Agreement, are not considered a significant resource. The structures were not found to have any historical significance, and therefore fall under Property Type 1, Minor, ubiquitous or fragmentary infrastructure elements and would not be significant. Overall, there were no historical cultural resources identified on the project site and therefore the project would have a less than significant impact.

b) *Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?*

Less Than Significant With Mitigation Incorporated. As indicated above there were no archaeological resources found on-site, this is substantiated through a CHRIS records search, background research, review of historical topographic and aerial imagery, a Sacred Land File Search, and a pedestrian survey. However, the absence of substantial surface prehistoric or historic-period archaeological remains within the project vicinity and the existing level of disturbance does not preclude the possibility of subsurface resources. Though the circumstances would present a low possibility, the following mitigation measure (MM) would reduce impacts in the unanticipated discovery of archaeological resources during construction. With the implementation of MM CUL-1 and MM CUL-2, impacts would be less than significant.

MM CUL-1 Prior to the issuance of any grading permits for the proposed Project, the project applicant shall demonstrate that a qualified archaeologist has been retained to monitor and observe rough grading and trenching activities. If potentially significant archaeological resources are encountered during subsurface excavation activities, all construction activities within a 100-foot radius of the resource shall cease until a qualified archaeologist determines whether the resource requires further study. The City shall require that the applicant include a standard inadvertent discovery clause in every construction contract to inform contractors of this requirement. Any previously undiscovered resources found during construction shall be recorded on appropriate Department of Parks and Recreation forms and evaluated for significance in terms of California Environmental Quality Act criteria by a qualified archaeologist. Potentially significant cultural resources consist of but are not limited to stone, bone, fossils, wood, or shell artifacts or features, including hearths, structural remains, or historic dumpsites. If the resource is determined to be significant under CEQA, the City and a qualified archaeologist shall determine whether preservation in place is feasible. Such preservation in place is the preferred mitigation. If such preservation is infeasible, the qualified archaeologist shall prepare and implement a research design and archaeological data recovery plan for the resource. The archaeologist shall also conduct appropriate technical analyses, prepare a comprehensive written report and file it with the appropriate information center (California Historical Resources Information System), and provide for the permanent curation of the recovered materials.

MM CUL-2: Prior to the issuance of any grading permits for the proposed Project, a Cultural Awareness Training Program shall be provided to all construction managers and construction personnel prior to commencing any ground disturbance work at any of the project sites. The training shall be prepared and conducted by a qualified archaeologist to the satisfaction of the City Planning Department. The training may be discontinued when ground disturbance is completed. Construction personnel shall not be permitted to operate equipment within the construction area unless they have attended the training. A copy of the training materials and/or training video, as well as a list of the names of all personnel who attended the training and copies of the signed acknowledgment forms shall be submitted to the City Planning Department for their review and approval.

c) *Disturb any human remains, including those interred outside of dedicated cemeteries?*

Less Than Significant Impact. No human remains are known to be present within the project site. If human remains are found, those remains would require proper treatment in accordance with applicable laws, including Health and Safety Code (HSC) §§ 7050.5-7055 and PRC § 5097.98 and § 5097.99. HSC §§ 7050.5-7055 describe the general provisions for treatment of human remains. Specifically, HSC § 7050.5 prescribes the requirements for the treatment of any human remains that are accidentally discovered during excavation of a site. HSC § 7050.5 also requires that all activities cease immediately, and a qualified archaeologist and Native American monitor be contacted immediately. As required by state law, the procedures set forth in PRC § 5097.98 would be implemented, including evaluation by the County Coroner and notification of the NAHC. The NAHC would then designate the “Most Likely Descendent” of the unearthed human remains. If human remains are found during excavation, excavation would be halted in the vicinity of the discovery and any area that is reasonably suspected to overlay adjacent remains shall remain undisturbed until the County Coroner has investigated, and appropriate recommendations have been made for the treatment and disposition of the remains. Compliance with the established regulatory framework (i.e., HSC § 7050.5-7055 and PRC §§ 5097.98 and 5097.99) would ensure potential Project impacts concerning human remains are reduced to less than significant

Cumulative Impacts

Overall, the project would not cause a considerable impact to historical cultural resources, archaeological cultural resources, or human remains. Due to the project location and previously disturbed project site ground, and the addition of the above listed mitigation measures the proposed project would not cause a cumulatively considerable impact to occur.

5.6 ENERGY

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
ENERGY. Would the project:				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?			X	
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?			X	

REGULATORY SETTING

State

Renewable Energy Standards

In 2002, California established its Renewable Portfolio Standard program^{12F3} with the goal of increasing the annual percentage of renewable energy in the state's electricity mix by the equivalent of at least 1 percent of sales, with an aggregate total of 20 percent by 2017. The California Public Utilities Commission subsequently accelerated that goal to 2010 for retail sellers of electricity (Public Utilities Code Section 399.15(b)(1)). Then-Governor Schwarzenegger signed Executive Order S-14-08 in 2008, increasing the target to 33 percent renewable energy by 2020. In September 2009, then-Governor Schwarzenegger continued California's commitment to the Renewable Portfolio Standard by signing Executive Order S-21-09, which directs the California Air Resources Board under its AB 32 authority to enact regulations to help the State meet its Renewable Portfolio Standard goal of 33 percent renewable energy by 2020. In September 2010, the California Air Resources Board adopted its Renewable Electricity Standard regulations, which require all of the State's load-serving entities to meet this target. In October 2015, then-Governor Brown signed into legislation Senate Bill 350, which requires retail sellers and publicly owned utilities to procure 50 percent of their electricity from eligible renewable energy resources by 2030. Signed in 2018, SB 100 revised the goal of the program to achieve the 50 percent renewable resources target by December 31, 2026, and to achieve a 60 percent target by December 31, 2030. SB 100 also established a further goal to have an electric grid that is entirely powered by clean energy by 2045. Under the bill, the State cannot increase carbon emissions elsewhere in the western grid or allow resource shuffling to achieve the 100 percent carbon-free electricity target.

³ The Renewable Portfolio Standard is a flexible, market-driven policy to ensure that the public benefits of wind, solar, biomass, and geothermal energy continue to be realized as electricity markets become more competitive. The policy ensures that a minimum amount of renewable energy is included in the portfolio of electricity resources serving a state or country.

California 2007 Energy Action Plan Update

The 2007 Energy Action Plan II is the State's principal energy planning and policy document. The plan describes a coordinated implementation strategy to ensure that California's energy resources are adequate, affordable, technologically advanced, and environmentally sound. In accordance with this plan, the state and its electricity providers would invest first in energy efficiency and demand-side resources, followed by renewable resources, and only then in clean conventional electricity supply to meet its energy needs.

Building Codes

Energy conservation standards for new residential and nonresidential buildings were adopted by the California Energy Resources Conservation and Development Commission (now the California Energy Commission) in June 1977 and are updated every three years (Title 24, Part 6, of the California Code of Regulations). Title 24 requires the design of building shells and building components to conserve energy. The standards are updated periodically to allow for consideration and possible incorporation of new energy efficiency technologies and methods. On May 9, 2018, the CEC adopted the 2019 Building Energy Efficiency Standards, which took effect on January 1, 2020.

The current 2019 Standards improve upon the previous 2016 Standards. Under the 2019 Title 24 standards, residential buildings are about 7 percent more energy efficient, and when the required rooftop solar is factored in for low-rise residential construction, residential buildings that meet 2019 Title 24 standards would use about 53 percent less energy than those built to meet current standards.

California Green Building Standards Code

The California Green Building Standards Code (California Code of Regulations, Title 24, Part 11), commonly referred to as the CALGreen Code, is a statewide mandatory construction code that was developed and adopted by the California Building Standards Commission and the California Department of Housing and Community Development. CALGreen standards require new residential and commercial buildings to comply with mandatory measures under five topical areas: planning and design; energy efficiency; water efficiency and conservation; material conservation and resource efficiency; and environmental quality. CALGreen also provides voluntary measures (CALGreen Tier 1 and Tier 2) that local governments may adopt which encourage or require additional measures in the five green building topics. The most recent update to the CALGreen Code was adopted in 2019 and went into effect January 1, 2020.

2006 Appliance Efficiency Regulations

The California Energy Commission adopted Appliance Efficiency Regulations (Title 20, CCR Sections 1601 through 1608) on October 11, 2006. The regulations were approved by the California Office of Administrative Law on December 14, 2006. The regulations include standards for both Federally regulated appliances and non-Federally regulated appliances. While these regulations are now often viewed as "business-as-usual," they exceed the standards imposed by all other states and they reduce GHG emissions by reducing energy demand.

California Utility Efficiency Programs (Senate Bill 1037 and Assembly Bill 2021)

SB 1037 and AB 2021 require electric utilities to meet their resource needs first with energy efficiency. California Utility Efficiency Programs have also set new targets for statewide annual energy demand reductions.

Regional and Local*City of Manteca General Plan*

The City of Manteca General Plan includes policies applicable to all development projects in Manteca. The following policies are specific to energy use and energy efficiency and applicable to the project.

Policy AQ-P-10 Encourage energy efficient building designs

Policy AQ-1-15 Design review criteria shall include the following considerations, at a minimum:

- The developer of a sensitive air pollution receptor shall submit documentation that the project design includes appropriate buffering (e.g., setbacks, landscaping) to separate the use from highways, arterial streets, hazardous material locations and other sources of air pollution or odor.
- Promote the use of new and replacement fuel storage tanks at refueling stations that are clean fuel compatible, if technically and economically feasible.
- The use of energy efficient lighting (including controls) and process systems beyond Title 24 requirements shall be encouraged where practicable (e.g., water heating, furnaces, boiler units, etc.)
- The use of energy efficient automated controls for air conditioning beyond Title 24 requirements shall be encouraged where practicable.
- Promote solar access through building siting to maximize natural heating and cooling, and landscaping to aid passive cooling and to protect from winds.

ENVIRONMENTAL IMPACTS

- a) *Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?*

Less Than Significant Impact.

Construction

The energy consumption associated with construction of the proposed project includes primarily diesel fuel consumption from on-road hauling trips and off-road construction diesel equipment, and gasoline consumption from on-road worker commute and vendor trips. Temporary electric power for as-necessary lighting and electronic equipment (such as computers inside temporary construction trailers, and heating, ventilation, and air conditioning) would be powered by a generator. The amount of electricity used during construction would be minimal; typical demand

would stem from the use of electrically powered hand tools and several construction trailers by managerial staff during the hours of construction activities. The majority of the energy used during construction would be from petroleum. This analysis relies on the construction equipment list and operational characteristics, as provided in the CalEEMod outputs for the project; see Appendix F. *Table 7: Project Energy Consumption During Construction* quantifies the construction energy consumption are provided for the project, followed by an analysis of impacts based on those quantifications.

Table 7: Project Energy Consumption During Construction

Source	Project Construction Usage	San Joaquin County Annual Energy Consumption	Percentage Increase Countywide
Electricity Use	Megawatt Hours (MWh)		
Water Consumption	44.39	5,736,910	0.0008%
Diesel Use	Gallons		
On-Road Construction Trips ¹	25,123	98,195,375.73	0.03%
Off-Road Construction Equipment ²	49,163	98,195,375.73	0.05%
Construction Diesel Total	74,286	98,195,375.73	0.08%
Gasoline	Gallons		
On-Road Construction Trips ¹	24,471	287,745,040	0.03%
1. On-road mobile source fuel use based on vehicle miles traveled (VMT) from CalEEMod and fleet-average fuel consumption in gallons per mile from EMFAC2021 in San Joaquin County for construction year 2022. 2. Off-road mobile source fuel usage based on a fuel usage rate of 0.05 gallons of diesel per horsepower (hp)-hour from USEPA. Abbreviations: CalEEMod: California Emission Estimation Model; EMFAC: Emission Factor Model 2021; Sources: Energy Calculations in Appendix F			

In total, construction of the project would consume approximately 44 megawatt hours (MWh) of electricity, 74,286 gallons of diesel and 24,471 gallons of gasoline. Water for project construction would represent 0.0008 percent of the County's water consumption. The project's fuel from the entire construction period would increase fuel use in the County by approximately 0.08 percent for diesel and 0.03 percent for gasoline.

There are no unusual project characteristics that would necessitate the use of construction equipment that would be less energy-efficient than at comparable construction sites in the region or state. In addition, some incidental energy conservation would occur during construction through compliance with State requirements that equipment not in use for more than five minutes be turned off. Project construction equipment would also be required to comply with the latest EPA and CARB engine emissions standards. These engines use highly efficient combustion engines to minimize unnecessary fuel consumption.

The CEQA Guideline Appendix G and Appendix F criteria requires the project's effects on local and regional energy supplies and on the requirements for additional capacity to be addressed. A 0.08 percent increase in construction fuel demand is not anticipated to trigger the need for additional capacity. Fuel consumption is based on a conservative construction phasing and conservative estimates for annual construction fuel consumption. Longer phases would result in lower construction intensity and a lower annual fuel consumption, resulting in lower annual demand on energy supplies. Additionally, use of construction fuel would cease once the project is fully developed. As such, project construction would have a nominal effect on the local and regional energy supplies. Therefore, it is expected that construction fuel consumption associated with the project would not be inefficient, wasteful, or unnecessary. The project would not substantially affect existing energy or fuel supplies, or resources and new capacity would not be required. Impacts would be less than significant in this regard.

Operations

The energy consumption associated with the project would include building electricity, water, and natural gas usage, as well as fuel usage from on-road vehicles. Quantification of operational energy consumption are provided for the project in *Table 8: Annual Energy Consumption During Operations*. Operation of uses implemented pursuant to the proposed project would annually consume approximately 4,162 MWh of electricity, 83,884 therms of natural gas, 652,465 gallons of diesel, and 350,525 gallons of gasoline.

Table 8: Annual Energy Consumption During Operations

Source	Project Operational Usage	San Joaquin County Annual Energy Consumption	Percentage Increase Countywide
Electricity Use	Megawatt Hour/Year (MWh/year)		
Area ¹	4,087	5,736,910	0.071%
Water ¹	75		0.001%
Total Electricity	4,162		0.072%
Natural Gas Use	Therms/year		
Area ¹	83,884	183,949,868	0.046%
Diesel Use	Gallons/Year		
Mobile ²	652,465	98,291,520	0.663%
Gasoline Use	Gallons/Year		
Mobile ²	350,525	284,968,748	0.123%
Notes:			
1. The electricity and natural gas usage are based on project-specific estimates and CalEEMod defaults.			
2. Calculated based on the mobile source fuel use based on vehicle miles traveled (VMT) and fleet-average fuel consumption (in gallons per mile) from EMFAC2021 for operational year 2023.			
Abbreviations: CalEEMod: California Emission Estimation Model; EMFAC2021: California Air Resources Board Emission Factor Model; MWh: Megawatt-hour			
Source: Energy Calculations in Appendix F			

Pacific Gas and Electric (PG&E) provides electricity to the project area. Electricity is currently used by the existing building on the project site. However, for a more conservative approach the project energy analysis does not take credit for baseline use. The project site is expected to continue to be served by the existing PG&E electrical facilities. Total electricity demand in PG&E's service area is forecast to increase by approximately 12,000 GWh—or 12 billion kWh—between 2016 and 2028.⁴ The project's anticipated electricity demand (approximately 4,162 MWh) would be nominal compared to overall demand in PG&E's service area.⁵ Therefore, the projected electrical demand would not significantly impact PG&E's level of service.

Regarding natural gas, San Joaquin County consumed 183,949,868 therms of natural gas in 2020. Therefore, the project's operational energy consumption of natural gas (83,884 therms/year) would represent 0.05 percent of the natural gas consumption in the County.

In 2023, Californians are anticipated to use approximately 14,997,128,554 gallons of gasoline and approximately 3,709,759,962 gallons of diesel fuel. San Joaquin County annual gasoline fuel use in 2023 is anticipated to be 593,638,414 gallons and diesel fuel is anticipated to be 103,305,684 gallons. Expected project operational use of gasoline and diesel would represent 0.002 percent of current gasoline use and 0.018 percent of current diesel use in the state. Project operational use of gasoline and diesel would represent 0.12 percent of gasoline use and 0.66 percent of diesel use in the County.

The project would be consistent with the 2019 Building Efficiency Standards, which took effect on January 1, 2020, and/or future Building Energy Efficiency Standards depending on when construction permits are issued. Prior to issuance of a building permit, the City of Manteca would review and verify that the project plans demonstrate compliance with the current version of the Building and Energy Efficiency Standards. Title 24 standards require energy conservation features in new construction (e.g., high-efficiency lighting, high-efficiency heating, ventilating, and air-conditioning (HVAC) systems, thermal insulation, double-glazed windows, water conserving plumbing fixtures).

Additionally, the project would also be required adhere to the provisions of CALGreen, which establishes planning and design standards for sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and internal air contaminants. The insulation and design code requirements would minimize wasteful energy consumption.

None of the project energy uses exceed one percent of San Joaquin County use. Therefore, it is expected that operational fuel and energy consumption associated with the project would not be inefficient, wasteful, or unnecessary. Impacts would be less than significant in this regard.

⁴ California Energy Commission, California Energy Demand 2018-2030 Revised Forecast, Figure 49 Historical and Projected Baseline Consumption PG&E Planning Area, April 2018.

⁵ The energy analysis does not take credit for baseline use for a more conservative approach.

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Less Than Significant Impact. The project would be required to comply with existing regulations, including applicable measures from the City's General Plan, or would be directly affected by the outcomes (vehicle trips and energy consumption would be less carbon intensive due to statewide compliance with future low carbon fuel standard amendments and increasingly stringent Renewable Portfolio Standards). As such, the project would not conflict with any other state-level regulations pertaining to energy. The project would comply with existing State energy standards and would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

Cumulative Impacts

As discussed above, it is expected that construction fuel consumption associated with the project would not be inefficient, wasteful, or unnecessary. The project would not substantially affect existing energy or fuel supplies, or resources and new capacity would not be required. Additionally, the project would also be required adhere to the provisions of CALGreen, which establishes planning and design standards for sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and internal air contaminants. The insulation and design code requirements would minimize wasteful energy consumption. As discussed above, none of the project energy uses exceed one percent of San Joaquin County use and it is expected that operational fuel and energy consumption associated with the project would not be inefficient, wasteful, or unnecessary. Therefore, the project's cumulative contribution of energy use would be less than significant, and the project's cumulative energy impacts would also be less than cumulatively considerable.

5.7 GEOLOGY AND SOILS

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Issues	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
7. GEOLOGY AND SOILS. Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.			X	
ii) Strong seismic ground shaking?		X		
iii) Seismic-related ground failure, including liquefaction?		X		
iv) Landslides?			X	
b) Result in substantial soil erosion or the loss of topsoil?		X		
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?		X		
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?		X		
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?			X	
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		X		

- a) *Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:*
- i) *Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.*

Less Than Significant Impact. The closest known fault to the project site is the Vernalis Fault located approximately 6 miles southeast. There are no earthquake fault zone boundaries or County designated fault zones identified at the Project site or within the city of Manteca. The Seismic Hazards Mapping Act, passed in 1990, requires mapping of seismic hazard zones and sets requirements for projects located within such zones. The project site is not within a seismic hazard zone map prepared under the Seismic Hazards Mapping Act (California Geological Survey 2021). Based on this information, the project would have no impact related to fault rupture hazards. This is consistent with the conclusions of the North Crossroads IS/MND, which did not identify significant impacts on this issue. Overall, impacts associated with the rupture of a known earthquake fault would be less than significant.

- ii) *Strong seismic ground shaking?*

Less Than Significant With Mitigation Incorporated. The Project site, located in the Central Valley has a low shaking potential (DOC, 2016b). Design and construction would still comply with the latest 2019 California Building Code (CBC), City regulations, and other applicable state standards which would minimize the potential of strong seismic ground shaking impacts. The CBC provides procedures for earthquake-resistant structural design based on the buildings risk or seismic design category that include considerations for on-site soil conditions, occupancy, and the configuration of the structure including the structural system and height. Compliance with the CBC and the below outlined mitigation measure would ensure seismic group shaking impacts would be at a less than significant level. Mitigation Measure MM GEO-1 would require the project applicant to submit design level geotechnical study to the City of Manteca for review. Therefore, with the Project conforming to the latest CBC Building Codes and MM GEO-1, impacts due to strong seismic ground shaking would be less than significant.

MM GEO-1: Prior to issuance of building permits, the project applicant shall submit a design-level geotechnical study and building plans to the City of Manteca for review and approval. The building plans shall demonstrate that they incorporate all applicable recommendations of the design-level geotechnical study and comply with all applicable requirements of the most recent version of the California Building Standards Code. A licensed professional engineer shall prepare the plans, including those that pertain to soil engineering, structural foundations, pipeline excavation, and installation. The approved plans shall be incorporated into the proposed project. All onsite soil engineering activities shall be conducted under the supervision of a licensed Geotechnical Engineer or Certified Engineering Geologist.

iii) Seismic-related ground failure, including liquefaction?

Less Than Significant with Mitigation Incorporated. Seismically induced liquefaction occurs when loose, water-saturated sediments of relatively low density are subjected to cyclic shaking that causes soils to lose strength or stiffness because of increased pore water pressure. The project does not fall within any liquefaction zones identified in the Seismic Hazards Map by the California Geological Survey (DOC, 2017). Additionally, the project does not fall within or near an Alquist-Priolo Fault Hazard Zone, Landslide Zone, or Liquefaction Zone as designated on the Department of Conservations (DOC) map viewer (DOC, 2022). As the project site is not designated within one of the above zones and all structures included in the project would be required by State law to be constructed in accordance with all applicable IBC and CBC earthquake construction standards, including those relating to soil characteristics, and adherence to MM GEO-1. The potential for substantial adverse effects to the project due to seismic-related ground failure, including liquefaction would therefore be less than significant.

iv) Landslides?

Less Than Significant Impact. The project site is located in a generally flat area and does not contain any steep slopes that could result in landslides on or in the vicinity of the project site. Also identified in the Seismic hazards Map by the California Geological Survey, there are no landslide zone boundaries that fall within the project site (DOC, 2017). The project would also conform with all applicable General Plan policies and additional federal, state, and local regulations. Therefore, impacts associated with landslides would be less than significant.

b) Result in substantial soil erosion or the loss of topsoil?

Less Than Significant With Mitigation Incorporated. According to the project site plans prepared for the proposed project, development of the proposed project would result in the creation of new impervious surface areas throughout the project site. The development of the project site would also cause ground disturbance of topsoil. The ground disturbance would be limited to the areas proposed for grading and excavation, including the proposed internal roadways and drain infrastructure improvements. After grading and excavation, and prior to overlaying the disturbed ground surfaces with impervious surfaces and structures, the potential exists for wind and water erosion to occur, which could adversely affect downstream storm drainage facilities.

Without implementation of appropriate Best Management Practices (BMPs) related to prevention of soil erosion during construction, development of the project would result in a potentially significant impact with respect to soil erosion. Mitigation Measure HYD-1 requires the project applicant to prepare and submit a Stormwater Pollution Prevention Plan identifying specific actions and BMPs to prevent stormwater pollution during construction activities. The SWPPP shall include, among other things, temporary erosion control measures to be employed for disturbed areas. Implementation of the following mitigation measure, therefore, would ensure the impact is less than significant.

- c) *Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?*

Less Than Significant With Mitigation Incorporated. The project site and surround areas are generally flat, which is not anticipated to result in significant landslides. As previously mentioned, there are no active faults, Seismic Hazard Program Liquefaction Zones, or Alquist-Priolo Fault Hazard Zones on the project site. Therefore, the potential for lateral spreading, subsidence, liquefaction, or collapse is unlikely. Subsidence is one factor that can cause unstable soil. To further prevent the above adverse effects all project components would be constructed in accordance with applicable City goals and policies, as well as Codes established by the CBC. All construction plans and related geotechnical plans and studies would be reviewed by the Town further ensuring compliance with all building construction standards. Compliance with all construction standards would reduce the potential for an off-site landslide, lateral spreading, subsidence, liquefaction or collapse and reduce the impacts to a less than significant level. In addition, the project applicant would be required to submit a geotechnical investigation report to the Town as part of MM GEO-1. As a result, with implementation of MM GEO-1 and the SWPPP, impacts associated would be less than significant.

- d) *Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?*

Less Than Significant With Mitigation Incorporated. Expansive soils are those that undergo volume changes as moisture content fluctuates; swelling substantially when wet or shrinking when dry. Soil expansion can damage structures by cracking foundations, causing settlement and distorting structural elements. Expansion is a typical characteristic of clay-type soils. Expansive soils shrink and swell in volume during changes in moisture content, such as a result of seasonal rain events, and can cause damage to foundations, concrete slabs, roadway improvements, and pavement sections. Soil expansion is dependent on many factors. The more clayey, critically expansive surface soil and fill materials would be subjected to volume changes during seasonal fluctuations in moisture content. There are no expansive (i.e., shrink-swell) soils within the project site. According to the USDA Web Soil survey, the project site contains 79.5% veritas fine sandy loam in the southeast portion of the site, and 20.5% bisgani loamy coarse sand in the northwest portion (USDA, 2021). Given the soils identified on site, adherence to applicable Federal, State, and Local rules and regulations, and compliance with MM GEO-1 impacts would be less than significant.

- e) *Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?*

Less Than Significant Impact. The Project site would tie into existing 8-inch lateral sewer line within the public right of way. Therefore, the project would not involve a septic system and there would be a less than significant impact from incompatible soils.

f) *Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?*

Less Than Significant With Mitigation Incorporated. There are no known paleontological resources located in project area. However, development of the proposed project could result in the discovery and disturbance of previously unknown or undiscovered paleontological resources. While fossils are not expected to be discovered during construction, it is possible that significant fossils could be discovered during excavation activities, even in areas with a low likelihood of occurrence. Fossils encountered during excavation could be inadvertently damaged. If a unique paleontological resource is discovered, the impact to the resource could be substantial. MM GEO-3 would require that a qualified paleontologist monitor grading and excavation activities, and a paleontologist be notified if paleontological resources are found. If any scientifically important large fossil remains are uncovered, the paleontologist would have the authority to divert heavy equipment away from the fossil site. With implementation of MM GEO-3 and consistency with City ordinances, policies and goals, impacts associated with paleontological resources would be less than significant.

MM GEO-3: Paleontological Monitor. Prior to issuance of improvement plans, the City shall ensure that a qualified paleontologist shall be retained to prepare a Paleontological Resources Monitoring and Mitigation Plan (PRMMP). This plan will address specifics of monitoring and mitigation and comply with the recommendations of the Society of Vertebrate Paleontology's 2010 Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources. All ground disturbances in the project area that occur in previously undisturbed sediment with high paleontological sensitivity will require monitoring. The Project Paleontologist may periodically inspect construction activities to adjust the level of monitoring in response to subsurface conditions. In the event that any potentially significant paleontological resources are discovered, the paleontological monitor shall stop work inside a zone designated by him/her where additional paleontological resources could be found. A plan for the evaluation of the resource shall be submitted to the Community Development Director for approval.

Cumulative Impacts

Geology and soil-related impacts are generally site-specific and are determined by a particular site's soil characteristics, topography, and proposed land uses. Cumulative effects related to geology resulting from the implementation of proposed improvements of the site and surrounding areas could expose more persons and property to potential impacts due to seismic activity. Long-term impacts related to geology include the exposure of people to the potential for seismically induced ground shaking. Implementation of other cumulative projects would incrementally increase the number of people and structures subject to a seismic event. Seismic and geologic significance would be considered on a project-by-project basis through the preparation of a design-level geotechnical study and such exposures would be minimized through strict engineering guidelines as they pertain to protection against known geologic hazards and potential geologic and soil related impacts. The proposed project would not contribute to any cumulatively considerable geologic and/or soils impacts. Therefore, cumulative effects of increased seismic risk would be less than significant.

5.8 GREENHOUSE GAS EMISSIONS

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Issues	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
GREENHOUSE GAS EMISSIONS. Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X	
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			X	

REGULATORY SETTING

Federal

To date, national standards have not been established for nationwide GHG reduction targets, nor have any regulations or legislation been enacted specifically to address climate change and GHG emissions reduction at the project level. Various efforts have been promulgated at the federal level to improve fuel economy and energy efficiency to address climate change and its associated effects.

Energy Independence and Security Act of 2007. The Energy Independence and Security Act of 2007 (December 2007), among other key measures, requires the following, which would aid in the reduction of national GHG emissions:

- Increase the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard requiring fuel producers to use at least 36 billion gallons of biofuel in 2022.
- Set a target of 35 miles per gallon for the combined fleet of cars and light trucks by model year 2020 and direct the National Highway Traffic Safety Administration (NHTSA) to establish a fuel economy program for medium- and heavy-duty trucks and create a separate fuel economy standard for work trucks.
- Prescribe or revise standards affecting regional efficiency for heating and cooling products and procedures for new or amended standards, energy conservation, energy efficiency labeling for consumer electronic products, residential boiler efficiency, electric motor efficiency, and home appliances.

U.S. Environmental Protection Agency Endangerment Finding. The U.S. Environmental Protection Agency's (EPA) authority to regulate GHG emissions stems from the U.S. Supreme Court decision in *Massachusetts v. EPA* (2007). The Supreme Court ruled that GHGs meet the definition of air pollutants under the existing Federal Clean Air Act (FCAA) and must be regulated if these gases could be reasonably anticipated to endanger public health or welfare. Responding to the Court's ruling, the EPA finalized an

endangerment finding in December 2009. Based on scientific evidence, it found that six GHGs (CO₂, CH₄, N₂O, HFCs, PFCs, and SF₆) constitute a threat to public health and welfare. Thus, it is the Supreme Court's interpretation of the existing FCAA and the EPA's assessment of the scientific evidence that form the basis for the EPA's regulatory actions.

Federal Vehicle Standards. In response to the U.S. Supreme Court ruling discussed above, Executive Order 13432 was issued in 2007 directing the EPA, the Department of Transportation, and the Department of Energy to establish regulations that reduce GHG emissions from motor vehicles, non-road vehicles, and non-road engines by 2008. In 2009, the NHTSA issued a final rule regulating fuel efficiency and GHG emissions from cars and light-duty trucks for model year 2011, and in 2010, the EPA and NHTSA issued a final rule regulating cars and light-duty trucks for model years 2012–2016.

In 2010, an Executive Memorandum was issued directing the Department of Transportation, Department of Energy, EPA, and NHTSA to establish additional standards regarding fuel efficiency and GHG reduction, clean fuels, and advanced vehicle infrastructure. In response to this directive, the EPA and NHTSA proposed stringent, coordinated federal GHG and fuel economy standards for model years 2017–2025 light-duty vehicles. The proposed standards projected to achieve 163 grams per mile of CO₂ in model year 2025, on an average industry fleet-wide basis, which is equivalent to 54.5 miles per gallon if this level were achieved solely through fuel efficiency. The final rule was adopted in 2012 for model years 2017–2021, and NHTSA intends to set standards for model years 2022–2025 in a future rulemaking. On January 12, 2017, the EPA finalized its decision to maintain the current GHG emissions standards for model years 2022–2025 cars and light trucks. It should be noted that the EPA is currently proposing to freeze the vehicle fuel efficiency standards at their planned 2020 level (37 mpg), canceling any future strengthening (currently 54.5 mpg by 2026).

In addition to the regulations applicable to cars and light-duty trucks described above, in 2011, the EPA and NHTSA announced fuel economy and GHG standards for medium- and heavy-duty trucks for model years 2014–2018. The standards for CO₂ emissions and fuel consumption are tailored to three main vehicle categories: combination tractors, heavy-duty pickup trucks and vans, and vocational vehicles. According to the EPA, this regulatory program will reduce GHG emissions and fuel consumption for the affected vehicles by 6 to 23 percent over the 2010 baseline.

In August 2016, the EPA and NHTSA announced the adoption of the phase two program related to the fuel economy and GHG standards for medium- and heavy-duty trucks. The phase two program will apply to vehicles with model year 2018 through 2027 for certain trailers, and model years 2021 through 2027 for semi-trucks, large pickup trucks, vans, and all types and sizes of buses and work trucks. The final standards are expected to lower CO₂ emissions by approximately 1.1 billion metric tons and reduce oil consumption by up to 2 billion barrels over the lifetime of the vehicles sold under the program.

In 2018, the EPA stated their intent to halt various Federal regulatory activities to reduce GHG emissions, including the phase two program. California and other states have stated their intent to challenge federal actions that would delay or eliminate GHG reduction measures and have committed to cooperating with other countries to implement global climate change initiatives. On September 27, 2019, the EPA and the NHTSA published the "Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule Part One: One National Program." (84 Fed. Reg. 51,310 (Sept. 27, 2019).) The Part One Rule revokes California's authority to set its own GHG emissions standards and set zero-emission vehicle mandates in California. On March 31, 2020, the EPA and NHTSA finalized rulemaking for SAFE Part Two sets CO₂

emissions standards and corporate average fuel economy (CAFE) standards for passenger vehicles and light duty trucks, covering model years 2021-2026.

State

California Air Resources Board

The California Air Resources Board (CARB) is responsible for the coordination and oversight of State and local air pollution control programs in California. Various statewide and local initiatives to reduce California's contribution to GHG emissions have raised awareness about climate change and its potential for severe long-term adverse environmental, social, and economic effects. California is a significant emitter of CO₂e in the world and produced 440 million gross metric tons of CO₂e in 2015. In the state, the transportation sector is the largest emitter of GHGs, followed by industrial operations such as manufacturing and oil and gas extraction.

The State of California legislature has enacted a series of bills that constitute the most aggressive program to reduce GHGs of any state in the nation. Some legislation, such as the landmark AB 32 California Global Warming Solutions Act of 2006, was specifically enacted to address GHG emissions. Other legislation, such as Title 24 building efficiency standards and Title 20 appliance energy standards, were originally adopted for other purposes such as energy and water conservation, but also provide GHG reductions. This section describes the major legislation related to GHG emissions reduction.

Assembly Bill 32 (California Global Warming Solutions Act of 2006). AB 32 instructs the CARB to develop and enforce regulations for the reporting and verification of statewide GHG emissions. AB 32 also directed CARB to set a GHG emissions limit based on 1990 levels, to be achieved by 2020. It set a timeline for adopting a scoping plan for achieving GHG reductions in a technologically and economically feasible manner.

CARB Scoping Plan. CARB adopted the Scoping Plan to achieve the goals of AB 32. The Scoping Plan establishes an overall framework for the measures that would be adopted to reduce California's GHG emissions. CARB determined that achieving the 1990 emissions level would require a reduction of GHG emissions of approximately 29 percent below what would otherwise occur in 2020 in the absence of new laws and regulations (referred to as "business-as-usual"). The Scoping Plan evaluates opportunities for sector-specific reductions, integrates early actions and additional GHG reduction measures by both CARB and the state's Climate Action Team, identifies additional measures to be pursued as regulations, and outlines the adopted role of a cap-and-trade program. Additional development of these measures and adoption of the appropriate regulations occurred through the end of 2013. Key elements of the Scoping Plan include:

- Expanding and strengthening existing energy efficiency programs, as well as building and appliance standards.
- Achieving a statewide renewables energy mix of 33 percent by 2020.
- Developing a California cap-and-trade program that links with other programs to create a regional market system and caps sources contributing 85 percent of California's GHG emissions (adopted in 2011).

- Establishing targets for transportation-related GHG emissions for regions throughout California and pursuing policies and incentives to achieve those targets (several sustainable community strategies have been adopted).
- Adopting and implementing measures pursuant to existing state laws and policies, including California's clean car standards, heavy-duty truck measures, the Low Carbon Fuel Standard (amendments to the Pavley Standard adopted 2009; Advanced Clean Car standard adopted 2012), goods movement measures, and the Low Carbon Fuel Standard (adopted 2009).
- Creating targeted fees, including a public goods charge on water use, fees on gasses with high global warming potential, and a fee to fund the administrative costs of California's long-term commitment to AB 32 implementation.

In 2012, CARB released revised estimates of the expected 2020 emissions reductions. The revised analysis relied on emissions projections updated considering current economic forecasts that accounted for the economic downturn since 2008, reduction measures already approved and put in place relating to future fuel and energy demand, and other factors. This update reduced the projected 2020 emissions from 596 million metric tons of CO₂e (MMTCO₂e) to 545 MMTCO₂e. The reduction in forecasted 2020 emissions means that the revised business-as-usual reduction necessary to achieve AB 32's goal of reaching 1990 levels by 2020 is now 21.7 percent, down from 29 percent. CARB also provided a lower 2020 inventory forecast that incorporated state-led GHG emissions reduction measures already in place. When this lower forecast is considered, the necessary reduction from business-as-usual needed to achieve the goals of AB 32 is approximately 16 percent.

CARB adopted the first major update to the Scoping Plan on May 22, 2014. The updated Scoping Plan summarizes the most recent science related to climate change, including anticipated impacts to California and the levels of GHG emissions reductions necessary to likely avoid risking irreparable damage. It identifies the actions California has already taken to reduce GHG emissions and focuses on areas where further reductions could be achieved to help meet the 2020 target established by AB 32. By 2016, California had reduced GHG emissions below 1990 levels, achieving AB 32's 2020 goal four years ahead of schedule.

In January 2017, CARB released the 2017 Climate Change Scoping Plan Update (Second Update) for public review and comment (CARB, 2017). The Second Update sets forth CARB's strategy for achieving the state's 2030 GHG target as established in Senate Bill (SB) 32 (discussed below). The Second Update was approved by CARB's Governing Board on December 14, 2017.

Senate Bill 32 (California Global Warming Solutions Act of 2006: Emissions Limit. Signed into law in September 2016, SB 32 codifies the 2030 GHG reduction target in Executive Order B-30-15 (40 percent below 1990 levels by 2030). The bill authorizes CARB to adopt an interim GHG emissions level target to be achieved by 2030. CARB also must adopt rules and regulations in an open public process to achieve the maximum, technologically feasible, and cost-effective GHG reductions.

With SB 32, the Legislature passed companion legislation, AB 197, which provides additional direction for developing the Scoping Plan. On December 14, 2017, CARB adopted a second update to the Scoping Plan (CARB, 2017b). The 2017 Scoping Plan details how the State will reduce GHG emissions to meet the 2030 target set by Executive Order B-30-15 and codified by SB 32. Other objectives listed in the 2017

Scoping Plan are to provide direct GHG emissions reductions; support climate investment in disadvantaged communities; and support the Clean Power Plan and other Federal actions.

SB 375 (The Sustainable Communities and Climate Protection Act of 2008). Signed into law on September 30, 2008, SB 375 provides a process to coordinate land use planning, regional transportation plans, and funding priorities to help California meet the GHG reduction goals established by AB 32. SB 375 requires metropolitan planning organizations to include sustainable community strategies in their regional transportation plans for reducing GHG emissions, aligns planning for transportation and housing, and creates specified incentives for the implementation of the strategies. The applicable sustainable community strategy in the Bay Area is Plan Bay Area 2040.

AB 1493 (Pavley Regulations and Fuel Efficiency Standards). AB 1493, enacted on July 22, 2002, required CARB to develop and adopt regulations that reduce GHGs emitted by passenger vehicles and light duty trucks. Implementation of the regulation was delayed by lawsuits filed by automakers and by the EPA's denial of an implementation waiver. The EPA subsequently granted the requested waiver in 2009, which was upheld by the U.S. District Court for the District of Columbia in 2011. The regulations establish one set of emission standards for model years 2009–2016 and a second set of emissions standards for model years 2017 to 2025. By 2025, when all rules will be fully implemented, new automobiles will emit 34 percent fewer CO₂e emissions and 75 percent fewer smog-forming emissions.

SB 1368 (Emission Performance Standards). SB 1368 is the companion bill of AB 32, which directs the California Public Utilities Commission (CPUC) to adopt a performance standard for GHG emissions for the future power purchases of California utilities. SB 1368 limits carbon emissions associated with electrical energy consumed in California by forbidding procurement arrangements for energy longer than 5 years from resources that exceed the emissions of a relatively clean, combined cycle natural gas power plant. The new law effectively prevents California's utilities from investing in, otherwise financially supporting, or purchasing power from new coal plants located in or out of the state. The CPUC adopted the regulations required by SB 1368 on August 29, 2007. The regulations implementing SB 1368 establish a standard for baseload generation owned by, or under long-term contract to publicly owned utilities, for 1,100 pounds of CO₂ per megawatt-hour.

SB 1078 and SBX1-2 (Renewable Electricity Standards). SB 1078 required California to generate 20 percent of its electricity from renewable energy by 2017. This goal was accelerated with SB 107, which changed the due date to 2010 instead of 2017. On November 17, 2008, Executive Order S-14-08 established a Renewable Portfolio Standard target for California requiring that all retail sellers of electricity serve 33 percent of their load with renewable energy by 2020. Executive Order S-21-09 also directed CARB to adopt a regulation by July 31, 2010, requiring the state's load serving entities to meet a 33 percent renewable energy target by 2020. CARB approved the Renewable Electricity Standard on September 23, 2010 by Resolution 10-23. SB X1-2 codified the 33 percent by 2020 goal.

SB 350 (Clean Energy and Pollution Reduction Act of 2015). Signed into law on October 7, 2015, SB 350 implements the goals of Executive Order B-30-15. The objectives of SB 350 are to increase the procurement of electricity from renewable sources from 33 percent to 50 percent (with interim targets of 40 percent by 2024, and 45 percent by 2027) and to double the energy efficiency savings in electricity and natural gas end uses of retail customers through energy efficiency and conservation. SB 350 also reorganizes the Independent System Operator to develop more regional electricity transmission markets

and improve accessibility in these markets, which will facilitate the growth of renewable energy markets in the western United States.

AB 398 (Market-Based Compliance Mechanisms). Signed on July 25, 2017, AB 398 extended the duration of the Cap-and-Trade program from 2020 to 2030. AB 398 required CARB to update the Scoping Plan and for all GHG rules and regulations adopted by the State. It also designated CARB as the statewide regulatory body responsible for ensuring that California meets its statewide carbon pollution reduction targets, while retaining local air districts' responsibility and authority to curb toxic air contaminants and criteria pollutants from local sources that severely impact public health. AB 398 also decreased free carbon allowances over 40 percent by 2030 and prioritized Cap-and-Trade spending to various programs including reducing diesel emissions in impacted communities.

SB 150 (Regional Transportation Plans). Signed on October 10, 2017, SB 150 aligns local and regional GHG reduction targets with State targets (i.e., 40 percent below their 1990 levels by 2030). SB 150 creates a process to include communities in discussions on how to monitor their regions' progress on meeting these goals. The bill also requires the CARB to regularly report on that progress, as well as on the successes and the challenges regions experience associated with achieving their targets. SB 150 provides for accounting of climate change efforts and GHG reductions and identify effective reduction strategies.

SB 100 (California Renewables Portfolio Standard Program: Emissions of Greenhouse Gases). Signed into Law in September 2018, SB 100 increased California's renewable electricity portfolio from 50 to 60 percent by 2030. SB 100 also established a further goal to have an electric grid that is entirely powered by clean energy by 2045.

Executive Orders Related to GHG Emissions

California's Executive Branch has taken several actions to reduce GHGs using executive orders. Although not regulatory, they set the state's tone and guide the actions of state agencies.

Executive Order S-3-05. Executive Order S-3-05 was issued on June 1, 2005, which established the following GHG emissions reduction targets:

- By 2010, reduce greenhouse gas emissions to 2000 levels.
- By 2020, reduce greenhouse gas emissions to 1990 levels.
- By 2050, reduce greenhouse gas emissions to 80 percent below 1990 levels.

The 2050 reduction goal represents what some scientists believe is necessary to reach levels that will stabilize the climate. The 2020 goal was established to be a mid-term target. Because this is an executive order, the goals are not legally enforceable for local governments or the private sector.

Executive Order S-01-07. Issued on January 18, 2007, Executive Order S-01-07 mandates that a statewide goal shall be established to reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020. The executive order established a Low Carbon Fuel Standard (LCFS) and directed the Secretary for Environmental Protection to coordinate the actions of the California Energy Commission, CARB, the University of California, and other agencies to develop and propose protocols for

measuring the “life-cycle carbon intensity” of transportation fuels. CARB adopted the LCFS on April 23, 2009

Executive Order S-13-08. Issued on November 14, 2008, Executive Order S-13-08 facilitated the California Natural Resources Agency development of the 2009 California Climate Adaptation Strategy. Objectives include analyzing risks of climate change in California, identifying and exploring strategies to adapt to climate change, and specifying a direction for future research.

Executive Order S-14-08. Issued on November 17, 2008, Executive Order S-14-08 expands the state’s Renewable Energy Standard to 33 percent renewable power by 2020. Additionally, Executive Order S- 21- 09 (signed on September 15, 2009) directs CARB to adopt regulations requiring 33 percent of electricity sold in the state come from renewable energy by 2020. CARB adopted the Renewable Electricity Standard on September 23, 2010, which requires 33 percent renewable energy by 2020 for most publicly owned electricity retailers.

Executive Order S-21-09. Issued on July 17, 2009, Executive Order S-21-09 directs CARB to adopt regulations to increase California’s Renewable Portfolio Standard (RPS) to 33 percent by 2020. This builds upon SB 1078 (2002), which established the California RPS program, requiring 20 percent renewable energy by 2017, and SB 107 (2006), which advanced the 20 percent deadline to 2010, a goal which was expanded to 33 percent by 2020 in the 2005 Energy Action Plan II.

Executive Order B-30-15. Issued on April 29, 2015, Executive Order B-30-15 established a California GHG reduction target of 40 percent below 1990 levels by 2030 and directs CARB to update the Climate Change Scoping Plan to express the 2030 target in terms of million metric tons of CO₂e (MMTCO₂e). The 2030 target acts as an interim goal on the way to achieving reductions of 80 percent below 1990 levels by 2050, a goal set by Executive Order S-3-05. The executive order also requires the state’s climate adaptation plan to be updated every three years and for the state to continue its climate change research program, among other provisions. With the enactment of SB 32 in 2016, the Legislature codified the goal of reducing GHG emissions by 2030 to 40 percent below 1990 levels.

Executive Order B-55-18. Issued on September 10, 2018, Executive Order B-55-18 establishes a goal to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net negative emissions thereafter. This goal is in addition to the existing statewide targets of reducing GHG emissions. The executive order requires CARB to work with relevant state agencies to develop a framework for implementing this goal. It also requires CARB to update the Scoping Plan to identify and recommend measures to achieve carbon neutrality. The executive order also requires state agencies to develop sequestration targets in the Natural and Working Lands Climate Change Implementation Plan.

California Regulations and Building Codes

California has a long history of adopting regulations to improve energy efficiency in new and remodeled buildings. These regulations have kept California’s energy consumption relatively flat, even with rapid population growth.

Title 20 Appliance Efficiency Regulations. The appliance efficiency regulations (California Code of Regulations [CCR] Title 20, Sections 1601-1608) include standards for new appliances. Twenty-three categories of appliances are included in the scope of these regulations. These standards include

minimum levels of operating efficiency, and other cost-effective measures, to promote the use of energy-and water-efficient appliances.

Title 24 Building Energy Efficiency Standards. California’s Energy Efficiency Standards for Residential and Nonresidential Buildings (CCR Title 24, Part 6) was first adopted in 1978 in response to a legislative mandate to reduce California’s energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficient technologies and methods. Energy efficient buildings require less electricity; therefore, increased energy efficiency reduces fossil fuel consumption and decreases GHG emissions. The 2016 Building Energy Efficiency Standards approved on January 19, 2016 went into effect on January 1, 2017. The 2019 Building Energy Efficiency Standards were adopted on May 9, 2018 and took effect on January 1, 2020. Under the 2019 standards, residential dwellings are required to use approximately 53 percent less energy and nonresidential buildings are required to use approximately 30 percent less energy than buildings under the 2016 standards.

Title 24 California Green Building Standards Code. The California Green Building Standards Code (CCR Title 24, Part 11 code) commonly referred to as CALGreen, is a statewide mandatory construction code developed and adopted by the California Building Standards Commission and the Department of Housing and Community Development. The CALGreen standards require new residential and nonresidential buildings to comply with mandatory measures under the topics of planning and design, energy efficiency, water efficiency/conservation, material conservation and resource efficiency, and environmental quality. CALGreen also provides voluntary tiers and measures that local governments may adopt that encourage or require additional measures in the five green building topics. The latest CALGreen Code took effect on January 1, 2020 (2019 CALGreen). The 2019 CALGreen standards will continue to improve upon the existing standards for new construction of, and additions and alterations to, residential and nonresidential buildings. The new 2019 CALGreen standards require residential buildings are required to be solar ready through solar panels (refer to Section 110.10 in the 2019 Building Energy Efficiency Standards for more details).

Regional

San Joaquin Valley Air Basin Air Quality Management District Thresholds

The proposed Project lies within the northern portion of the San Joaquin Valley Air Basin (SJVAB). The San Joaquin Valley Air Pollution Control District (SJVAPCD) has jurisdiction over most air quality matters in the SJVAB and is tasked with implementing programs and regulations required by the federal and State Clean Air Acts. According to the SJVAPCD, impacts are less than significant if a project complies with adopted statewide, regional, or local plan for reduction or mitigation of GHG emissions.

Under CEQA, the SJVAPCD is a commenting responsible agency on air quality within its jurisdiction or impacting its jurisdiction. The SJVAPCD reviews projects to ensure that they would: (1) support the primary goals of the latest Air Quality Plan; (2) include applicable control measures from the Air Quality Plan; and (3) not disrupt or hinder implementation of any Air Quality Plan control measures.

Local

City of Manteca Climate Action Plan

The City of Manteca Climate Action Plan (CAP), approved in 2013, focuses on City operations, facilities and employee actions that will reduce not only GHG emissions but also energy and water consumption, solid waste and fuel consumption. The GHG emission reduction goals require a change from “business as usual” to attain them. The CAP outlines the goal of reducing per capita emissions from 6.9 per person in 2005 to 6.3 in 2035. CAP is being issued in the context of legislative and regulatory action at the federal and state level. California’s climate change goals are set forth in AB 32, the Global Warming Solutions Act of 2006. This legislation requires a reduction of California GHG emissions to 1990 levels by 2020. In December 2008, CARB approved the Climate Change Scoping Plan Document required by AB 32. The Scoping Plan Document, which provides a roadmap for California to reduce its GHG emissions, recognizes the importance of development and implementation of Climate Action Plans by California cities and counties. Executive Order S-03-05 goes even further by requiring statewide reductions in GHG emissions to 80 percent below 1990 by the year 2050.

City of Manteca Municipal Code

The City’s Municipal Code includes the following regulations that would reduce GHG emissions from future development:

- Green Code (Chapter 15.22)
- Building Conservation Code (Chapter 15.18)
- Energy Code (Chapter 11.105)

City of Manteca General Plan

The General Plan includes GHG reduction strategies to help the City sustain its natural resources, grow efficiently, and meet California legal requirements for GHG emissions reduction. Multiple policies and actions in the General Plan have GHG implications including those targeting land use, housing, transportation, water usage, solid waste generation and recycling, and reuse of historic buildings. The policies also include a monitoring component that allows for adaptation and adjustment of City programs and initiatives related to sustainability and associated reductions in GHG emissions. The GHG Reduction Strategy is intended to meet the mandates as outlined in the CEQA Guidelines and the recent standards for “qualified plans” as set forth by SJVAPCD.

The General Plan includes the following GHG reduction policies, which are applicable to the project.

- AQ-P-1:** Cooperate with other agencies to develop a consistent and coordinated approach to reduction of air pollution and management of hazardous air pollutants.
- AQ-P-10:** Encourage energy efficient building designs.
- AQ-I-15:** Design review criteria shall include the following considerations, at a minimum:
- The developer of a sensitive air pollution receptor shall submit documentation that the project design includes appropriate buffering (e.g., setbacks, landscaping) to separate the use from highways, arterial streets, hazardous material locations and other sources of air pollution or odor.

- Promote the use of new and replacement fuel storage tanks at refueling stations that are clean fuel compatible, if technically and economically feasible.
- The use of energy efficient lighting (including controls) and process systems beyond Title 24 requirements shall be encouraged where practicable (e.g., water heating, furnaces, boiler units, etc.)
- The use of energy efficient automated controls for air conditioning beyond Title 24 requirements shall be encouraged where practicable.
- Promote solar access through building siting to maximize natural heating and cooling, and landscaping to aid passive cooling and to protect from winds.

AQ-P-11: Prepare and maintain a Climate Action Plan and community greenhouse gas emission inventory for sectors with the potential for control or influence by the City that demonstrates consistency with State of California targets.

AQ-P-12: Development projects shall incorporate the applicable strategies of the City of Manteca Climate Action Plan as needed to demonstrate consistency with CAP reduction targets and AB 32.

AQ-I-16: Track and monitor aspects of development related to CAP strategies on an ongoing basis to measure progress in achieving CAP reduction targets.

AQ-I-17: Track implementation of municipal and community projects and programs related to energy efficiency, transit service improvements, transportation facilities such as bicycle paths and lanes, pedestrian infrastructure, and other projects that reduce greenhouse gas emissions throughout the community. AQ-I-18. Update CAP emission inventories, targets, and strategies to reflect new State of California greenhouse gas reduction targets when adopted for later years and to reflect the benefits of any new State and federal regulatory actions that reduce greenhouse gas emissions to demonstrate continued consistency with State targets.

CD-P-33: Passive solar design features are encouraged whenever possible. Design of buildings should consider energy-efficient concepts such as natural heating and/or cooling, sun and wind exposure and orientation, and other solar energy opportunities.

RC-P-6: Comply with construction and design standards that promote energy conservation.

THRESHOLDS

According to the SJVAPCD, impacts are less than significant if a project complies with adopted statewide, regional, or local plan for reduction or mitigation of GHG emissions. The vast majority of individual projects do not generate sufficient GHG emissions to create a project-specific impact through a direct influence on climate change; therefore, the issue of climate change typically involves an analysis of whether a project's contribution towards an impact is cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, other current projects, and probable future projects (CEQA Guidelines, Section 15355).

The SJVAPCD's has evaluated different approaches for estimating impacts and summarizing potential GHG emission reduction measures. The SJVAPCD staff has concluded that "existing science is inadequate to support quantification of impacts that project specific GHG emissions have on global climatic change." This is readily understood when one considers that global climatic change is the result of the sum total of GHG emissions, both man-made and natural that occurred in the past; that is occurring now; and will occur in the future. The effects of project specific GHG emissions are cumulative, and unless reduced or mitigated, their incremental contribution to global climatic change could be considered significant.

The *Final Draft Guidance for Assessing and Mitigating Air Quality Impacts* (SJVAPCD, 2015) provides an approach to assessing a Project's impacts on greenhouse gas emissions by evaluating the Project's emissions to the "reduction targets" established in ARB's AB 32 Scoping Plan. For instance, the SJVAPCD's guidance recommends that projects should demonstrate that *"project specific GHG emissions would be reduced or mitigated by at least 29%, compared to Business as Usual (BAU), including GHG emission reductions achieved since the 2002-2004 baseline period, consistent with GHG emission reduction targets established in ARB's AB 32 Scoping Plan. Projects achieving at least a 29% GHG emission reduction compared to BAU would be determined to have a less than significant individual and cumulative impact for GHG."*

Subsequent to the SJVAPCD's approval of the *Final Draft Guidance for Assessing and Mitigating Air Quality Impacts* (SJVAPCD 2015), the California Supreme Court issued an opinion that affects the conclusions that should/should not be drawn from a GHG emissions analysis that is based on consistency with the AB 32 Scoping Plan. More specifically, in *Center for Biological Diversity v. California Department of Fish and Wildlife*, the Court ruled that showing a "project-level reduction" that meets or exceeds the Scoping Plan's overall statewide GHG reduction goal is not necessarily sufficient to show that the project's GHG impacts will be adequately mitigated: *"the Scoping Plan nowhere related that statewide level of reduction effort to the percentage of reduction that would or should be required from individual projects..."* According to the Court, the lead agency cannot simply assume that the overall level of effort required to achieve the statewide goal for emissions reductions will suffice for a specific project.

Given this Court decision, reliance on a 29 percent GHG emissions reduction from projected BAU levels compared to a project's estimated 2020 levels as recommended in the SJVAPCD's guidance documents will not be the basis for an impact conclusion in this EIR. Given that the SJVAPCD staff has concluded that *"existing science is inadequate to support quantification of impacts that project specific GHG emissions have on global climatic change,"* this analysis instead relies on a qualitative approach to evaluate the project's GHG impacts. Specifically, the analysis relies on an assessment of the proposed project for consistency with the City of Manteca CAP, which is specifically designed to reduce GHG emissions in accordance with the GHG emission reduction targets identified by the State of California in the CARB Scoping Plan. Additionally, a qualitative analysis of the proposed project's consistency with other relevant planning documents and relevant laws is provided herein.

- a) *Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?*

Less than Significant Impact.

Short-Term Construction Greenhouse Gas Emissions

Construction of the project would result in direct emissions of CO₂, N₂O, and CH₄ from the operation of construction equipment and the transport of materials and construction workers to and from the project site. SJVAPCD does not have a threshold for construction GHG emissions, which are one-time, short-term *emissions* and therefore would not significantly contribute to long-term cumulative GHG emissions impacts of the proposed project. However, the SJVAPCD advises that construction GHG should be disclosed and a determination on the significance of construction GHG emissions in relation to meeting AB 32 GHG reduction goals should be made. Total GHG emissions generated during all phases of construction were combined and are presented in *Table 9: Construction Greenhouse Gas Emissions*. The CalEEMod outputs are contained within the Appendix G.

Table 9: Construction Greenhouse Gas Emissions

Year	MTCO ₂ e ¹
2022	288
2023	684
Total	972
<i>Amortized</i>	32.1
MTCO ₂ e = metric tons of carbon dioxide equivalent. 1. Due to Rounding, Total MTCO ₂ e may be marginally different from CalEEMod output. Source: CalEEMod version 2016.4.0. Refer to Appendix G for model outputs.	

As shown in *Table 9*, project construction-related activities would generate approximately 972 MTCO₂e of GHG emissions over the course of construction. One-time, short-term construction GHG emissions are typically summed and amortized over the project's lifetime (assumed to be 30 years). It is reasonable to look at a 30-year time frame for buildings since this is a typical interval before a new building requires the first major renovation. The amortized project emissions would be approximately 32.1 MTCO₂e per year. Once construction is complete, the generation of construction-related GHG emissions would cease.

Long-Term Operational Greenhouse Gas Emissions

The proposed project would include the demolition of the existing buildings and construction of 11 commercial/retail buildings, totaling 209,730 square feet. Operational or long-term emissions would occur over the project's life. GHG emissions would result from direct emissions such as project generated vehicular traffic, on-site combustion of natural gas, and operation of any landscaping equipment. Operational GHG emissions would also result from indirect sources, such as off-site generation of electrical power over the life of the project, the energy required to convey water to, and wastewater from the project site, the emissions associated with solid waste generated from the project site, and any fugitive refrigerants from air conditioning or refrigerators. It should be noted that the project would comply with the 2019 Title 24 Part 6 Building Energy Efficiency Standards. The standards require updated thermal envelope standards (preventing heat transfer from the interior to exterior and vice versa), residential and nonresidential ventilation requirements, and nonresidential lighting requirements that would cut residential energy use by more than 50 percent (with solar) and nonresidential energy use by

30 percent. The standards also encourage demand responsive technologies including battery storage and heat pump water heaters and improve the building's thermal envelope through high performance attics, walls and windows to improve comfort and energy savings (California Energy Commission, March 2018). The project would also comply with the appliance energy efficiency standards in Title 20 of the California Code of Regulations. The Title 20 standards include minimum levels of operating efficiency, and other cost-effective measures, to promote the use of energy- and water-efficient appliances. The project would be constructed according to the standards for high-efficiency water fixtures for indoor plumbing and water efficient irrigation systems required in 2019 Title 24, Part 11 (CALGreen).

At the State and global level, improvements in technology, policy, and social behavior can also influence and reduce operational emissions generated by a project. The state is currently on a pathway to achieving the Renewable Portfolio Standards goal of 60 percent renewables by 2030 per SB 100.

The majority of project emissions would occur from mobile and energy sources. Energy and mobile sources are targeted by statewide measures such as low carbon fuels, cleaner vehicles, strategies to promote sustainable communities and improved transportation choices that result in reducing VMT, continued implementation of the Renewable Portfolio Standard (the target is now set at 60 percent renewables by 2030), and extension of the Cap-and-Trade program (requires reductions from industrial sources, energy generation, and fossil fuels). The Cap-and-Trade program covers approximately 85 percent of California's GHG emissions as of January 2015. The statewide cap for GHG emissions from the capped sectors (i.e., electricity generation, industrial sources, petroleum refining, and cement production) commenced in 2013 and will decline approximately three percent each year, achieving GHG emission reductions throughout the program's duration. The passage of AB 398 in July 2017 extended the duration of the Cap-and-Trade program from 2020 to 2030. With continued implementation of various statewide measures, the project's operational energy and mobile source emissions would continue to decline in the future.

As discussed in Impact Statement GHG-2, below, the proposed development would be constructed in compliance with the City's CAP which would requires the project to achieve GHG emissions reductions by implementing specific reduction strategies. The proposed project, therefore, would be consistent with the City's GHG Reduction and General Plan and would have a less than significant GHG emissions impact.

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Less Than Significant Impact.

City of Manteca Climate Action Plan Consistency

On October 15, 2013, the City of Manteca adopted their CAP, which is intended to support the goals of AB 32 and SB 32. The CAP is designed to reduce community-related and City operations-related GHG emissions to a degree that would not hinder or delay implementation of AB 32. In order to do such, the City has outlined a course of action for the City government and the community of Manteca to reduce per capita GHG emissions. Projects showing consistency with the CAP would be considered not to contribute significant GHG emissions impacts.

For new development projects constructed in the City of Manteca, the CAP requires the development projects to achieve GHG emissions reductions by implementing specific reduction strategies. The City of Manteca CAP is consistent with the goals presented in AB 32 and SB 32 and, therefore, projects considered consistent with the CAP would be considered to result in a less-than-significant impact related to GHG emissions. The proposed project's consistency with the reduction strategies in the CAP is assessed in *Table 10: City of Manteca CAP Consistency* below.

Table 10: City of Manteca CAP Consistency

CAP Strategy	Project Consistency
Comply with the applicable land use, sustainable development, and resource conservation policies of the Manteca General Plan	Consistent. The proposed project would not require any land use changes, as the existing designation is consistent with the proposed mixed-use development.
Construct project transportation infrastructure that supports walking, bicycling, and transit use	Consistent. The proposed project would not alter existing street, pedestrian walkways or bike lanes. Additionally, the project would include connections to the existing pedestrian walkways.
Implement transportation demand management programs in projects with large numbers of employees	Consistent. The City would notify the developer of the proposed project regarding the requirements of SJVAPCD Rule 9410 to implement TDM programs that reduce commute trips.
Design and construct project buildings to exceed Title 24 Energy Efficiency Standards by at least 10 percent	Consistent. The proposed project would be required to comply with all applicable standards set forth in Title 24. Additionally, the proposed would be required to meet the water efficiency regulations within CALGreen Code.
Implement project buildings including water conservation measures that meet or exceed the California Green Building Code standards 20 percent requirement	Consistent. The proposed project would comply with water conservation per the California Green Building Standards Code, which requires a 20 percent reduction in indoor water use. The project would include low flow appliances and fixtures.
Install project landscaping that meets or exceeds water conservation standards of the City's adopted landscaping ordinance 20 percent reduction requirement	Consistent. The proposed Project would comply with the State's Model Water Efficient Landscape Ordinance. In addition, the project would be required to comply with the adopted water conservation standards set forth in Chapter 17.48 of the City's Municipal Code.
Develop programs to exceed state recycling and diversion targets by at least 10 percent.	Consistent. Pursuant to Municipal Code Section 13.02.120, all construction materials associated with the proposed project shall be recycled. The City of Manteca offers a free commercial recycling pickup service which would be available to the proposed project during operations.
Source: City of Manteca, <i>Climate Action Plan</i> , October 15 th , 2013.	

Because the strategies included in the CAP would achieve local reductions that are adequate to meet the City's 2020 target, which is consistent with the AB 32 reduction targets, if the project is consistent with the City's CAP, the proposed project would not be considered to generate GHG emissions, either directly or indirectly, that may result in a significant impact on the environment or conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing emissions of GHGs. As shown in *Table 10*, the proposed project would be consistent with the strategies as described in the City of Manteca CAP and it functions as an implementation project toward achieving the City's CAP. As such, the proposed Project would not generate GHG emissions that would have a significant impact on the environment or conflict with any applicable plans, policies, or regulations and impacts related to greenhouse gases are less than significant.

Cumulative Impacts

It is generally the case that an individual project of the project's size and nature is of insufficient magnitude by itself to influence climate change or result in a substantial contribution to the global GHG inventory. GHG impacts are recognized as exclusively cumulative impacts; there are no non-cumulative GHG emission impacts from a climate change perspective. The additive effect of project-related GHG emissions would not result in a reasonably foreseeable cumulatively considerable contribution to global climate change. In addition, the project as well as other cumulative related projects, would be subject to all applicable regulatory requirements, which would further reduce GHG emissions. As discussed in GHG-2 discussion above, the project would be consistent with the City's CAP. Thus, the project would not conflict with any GHG reduction plan. Therefore, the project's cumulative contribution of GHG emissions would be less than significant and the project's cumulative GHG impacts would also be less than cumulatively considerable.

5.9 HAZARDS AND HAZARDOUS MATERIALS

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Issues	Less Than Significant With Mitigation Incorporat ed	Less Than Significant Impact	No Impact
HAZARDS AND HAZARDOUS MATERIALS. Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			X	
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			X	
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			X	
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?			X	
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?			X	
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			X	
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?			X	

a) *Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?*

Less Than Significant Impact.

Construction

Any potentially hazardous materials used during Project construction would be handled on-site. This generally includes paints and solvents and other petroleum-based products, usually used for on-site construction equipment and for building exterior finishes. The use or handling of these potentially hazardous materials would be short-term only during the construction phase of Project. Although these materials could be stored on-site, they would be required to comply with the guidelines established by the City of Manteca. The transport, removal, and disposal of hazardous materials on the Project site would be conducted by a permitted and licensed service provider consistent with federal, state, and local requirements including the EPA, the California Department of Toxic Substances Control (DTSC), the California Occupational Safety and Health Administration (Cal/OSHA), Caltrans, the Resource Conservation and Recovery Act, and the Victorville Fire Department (VFD) or through the Conditionally Exempt Small Quantity Generator (CESQG) Program. With the compliance with local, state, and federal regulations short-term construction impacts associated with the handling, transport, use, and disposal of hazardous materials would be less than significant.

Operations

During project operations, widely used hazardous materials common at commercial/retail and office uses include cleaners, pesticides, and food waste would be present. The remnants of these and other products are disposed of as household hazardous waste that are prohibited or discouraged from being disposed of at local landfills. Regular operation and maintenance of the project structures would not result in significant impacts involving use, storage, transport or disposal of hazardous wastes and substances. Use of common commercial/retail and office hazardous materials and their disposal does not present a substantial health risk to the community. Additionally, the project site is not included on the list of hazardous waste sites (Cortese List) compiled by the Department of Toxic Substances Control (DTSC) pursuant to Government Code § 65962.5 and therefore would not release known hazardous materials due to ground-disturbing activities.⁶ Project impacts associated with the routine transport and use of hazardous materials or wastes would be less than significant.

Direct hazardous waste would be generated from landscaping involving the use of pesticides/herbicides and fertilizers. Landscaping maintenance best management practices (BMPs) would be conducted according to the California Stormwater Quality Associations; Stormwater BMPs which would reduce pesticides and fertilizers from running off off-site. Indirect hazardous materials such as sediment, metals, oils and grease, trash/debris and other organic compounds that usually known as stormwater pollutants would be captures via infiltration basins to avoid stormwater runoff from seeping off-site consistent with the City's stormwater management requirements.

⁶ Department of Toxic Substances Control (DTSC) EnviroStor. 2021. *Hazardous Waste and Substances Site List*. <https://www.envirostor.dtsc.ca.gov/public/map/?myaddress=menifee>. Accessed March 2021.

Hazardous waste generated from the proposed vehicle service station/car wash could include cleaning agents, sediments, oil/grease, etc. There also would be limited transport and storage of pool cleaning supplies, associated with the proposed Hotel. The chemicals used to maintain the pool would be stored in compliance with all applicable Federal, State, and City requirements and any additional laws or regulations. The waste associated with this will conform to applicable federal, state, and local agency regulations. Proposed development is subject to the requirements of Chapter 13.28 of the Manteca Municipal Code. – Stormwater Management and Discharge Control. The purpose of these requirements is to “establish minimum storm water management requirements and controls to protect and safeguard the general health, safety and welfare of the public residing in watersheds within the City of Manteca.” These requirements are intended to assist in the protection and enhancement of the water quality of watercourses, water bodies, and wetlands in a manner pursuant to and consistent with the Federal Water Pollution Control Act (Clean Water Act, 33 USC Section 1251 et seq.), Porter- Cologne Water Quality Control Act (California Water Code Section 13000 et seq.) and National Pollutant Discharge Elimination System (“NPDES”) Permit No. CAS000004, as such permit is amended and/or renewed.

Operations of the gas station would include the use, transport and handling of hazardous materials. Specifically, operation activities would include the regular transportation of gasoline to refill USTs, refilling USTs and pumping gasoline to fuel dispensers, and regular use of the fuel dispensers by motorists. As a result, the proposed Maverik gas station could result in potentially adverse impacts to people and the environment as a result of hazardous materials being accidentally released into the environment (e.g., operators or motorists could spill gasoline while refueling, USTs or pipes dispensing fuel from USTs could leak, automobiles could crash into fuel dispensers, or motorists could refuel while having engine running causing a fire hazard). However, the proposed Maverik Gas Station would be required to operate in compliance with all with applicable federal, state, and local requirements which lessen the potential for these impacts. Some of these regulations include:

- California State Water Resources Control Board (SWRCB) Health and Safety Code, Section 25280, underground storage tanks (USTs) installed after 1988 are required to have a leak detection system consisting of at least one of the following detection methods: secondary containment with interstitial monitoring, automatic tank gauging systems (including continuous automatic tank gauging systems), vapor monitoring (including tracer compound analysis), groundwater monitoring, statistical inventory reconciliation, or other method meeting established performance standards.
- Efficacy requirements established by Environmental Protection Agency (EPA) require that leak detection methods be able to detect certain leak rates and that they also give the correct answer consistently. In general, methods must detect the specified leak rate with a probability of detection of at least 95 percent and a probability of false alarm of no more than 5 percent. EPA found that, with effective leak detection, operators can respond quickly to signs of leaks and minimize the extent of environmental damage and the threat to human health and safety.
- USTs and associated fuel delivery infrastructure (i.e., fuel dispensers) would be required to comply with applicable federal, state, and local regulations, including those provisions established by

Section 2540.7, Gasoline Dispensing and Service Stations, of the California OSHA Regulations; Chapter 38, Liquefied Petroleum Gases, of the California Fire Code; the Resource Conservation and Recovery Act; and the County Fire Department Hazardous Materials Division.

- The proposed Project would also be required to incorporate high-efficiency Phase I and Phase II enhanced vapor recovery (EVR) systems to capture and control gasoline fumes. EVR refers to a new generation of equipment to control emissions at gasoline dispensing facilities in California. EVR systems collect gasoline vapors that would otherwise escape into the atmosphere during bulk fuel delivery (Phase I) or fuel storage and vehicle refueling (Phase II). Since 2009, the installation of Phase I and Phase II EVR systems has been required for gasoline dispensing facilities.
- The fuel dispensers, USTs, and associated fuel delivery infrastructure would be subject to routine inspection by federal, state, and local regulatory agencies with jurisdiction over convenience service station facilities.
- The handling, transport, use, and disposal of hazardous materials must comply with applicable federal, state, and local agencies and regulations.
- In addition to compliance with local, state, and federal requirements, Maverick would take additional measures to prevent environmental and safety impacts. Some of these additional measures, which are proposed as Project design features, include:
 - Product, vapor, and vent piping would be noncorrosive and would provide three levels of protection. First, product piping would be monitored with pressure line leak detection. Second, piping would be double wall to provide secondary containment. Third, fiberglass piping would be additionally monitored under vacuum in accordance with AB 2481 regulations such that, if a breach is detected in the vacuum, the product delivery system would shut down, and the system would sound an audible alarm.
 - Piping connections to the tanks and dispensers would be flexible. Flexible connectors would be used to prevent rupture from any form of ground movement.
 - Piping would slope to the sumps at the USTs. If a piping leak occurs, the gasoline would flow through the secondary pipe to the sump, where a sensor would be triggered to immediately shut down the system and activate an audible/visual alarm.
 - Tanks and dispensers would be equipped with latest Phase I and Phase II EVR vapor recovery air pollution control equipment technology in accordance with the California Air Resources Board regulations and associated Executive Orders. The Phase I EVR equipment would control the vapors in the return path from the tanks back to the tanker truck during offloading filling operations. Phase I EVR systems are 98 percent effective in controlling fugitive emissions from escaping into the environment. Phase II EVR equipment, which also includes “in-station diagnostics,” would control and monitor the vapors in the return path from the vehicles back to the tanks and are 95 percent effective in controlling fugitive emissions from escaping into the environment.
- The UST monitoring system incorporates automatic shutoffs. If gasoline is detected in the sump at the fuel dispenser, the dispenser would shut down automatically, and an alarm would sound. If a problem is detected with a tank, the tank would be automatically shut down, and an alarm would sound. If the product piping system detects a failure of the 0.1 gallons per hour test, the

line would be automatically shut down, and the alarm would sound. Pursuant to federal requirements, monitoring equipment must be able to detect a minimum leak of 3 gallons per hour (equivalent to the accuracy of a mechanical leak detector). Each fuel dispenser would include several safety devices. Specifically, each dispenser sump would be equipped with an automatic shutoff valve to protect against vehicle impact. In addition, each fuel hose would include a breakaway device that would stop the flow of fuel at both ends of the hose in the event of an accidental drive-off. Also, each dispenser would be equipped with internal fire extinguishers. Lastly, dispensers would include leak detection sensors connected to the alarm console inside the controller closure.

Therefore, based on compliance with federal, state, and local regulations, and the incorporation of the proposed Project design features, impacts associated with the handling, transport, use, and disposal of hazardous materials and the release of hazardous materials into the environment would be less than significant

- b) *Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?*

Less Than Significant Impact. As previously mentioned, the project site is previously disturbed undeveloped land, excluding a small portion on the west side of the project site. The project site proposed grading is expected to be a balanced cut and fill requiring no imported soil to backfill excavated areas. This eliminates the potential risk of imported soils being contaminated and requiring appropriate sampling.

The project is located with SR 120 and the Airport Way off ramp to the north, Airport Way to the east, and W Atherton Dr to the south. SR 120 and the Airport Way off ramp, Airport Way, and W Atherton Dr, were all constructed prior to 1992 when lead was still being added to gasoline. Aerially deposited lead (ADL) contaminated soils may exist along roadsides up to 30 feet⁷ from the pavement and within the top 6 inches of the soil. Development of the project does not include any disturbance of soils within 30 ft of SR 120. The off ramp is approximately 30 ft from the project site boundaries and was not heavily utilized prior to 1992, therefore no ADL contaminated soils are expected to be encountered on the north boundary of the project site. Prior to 1992 Airport Way to the east of the project site had not been expanded to include right and left turn lanes. At the time of potential ADL exposure, the distance between the paved road and project site would be greater than 30 ft. Overall, there is not expected to be any ADL contaminated soils on the project site. The project does not propose any widening Airport Way or W. Atherton Drive. As such, potential impacts are considered less than significant.

Given the previous uses of the project site it is unlikely hazardous material would be discovered on-site. However, there is the potential for inadvertent discovery of hazardous waste from historic or future activities on or near the project site. At such time the proper agencies (i.e., fire

⁷ DTSC factsheet (available online here: <https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/f0004055-caltrans-fs-a11y.pdf>)

department, DTSC, and/or Cal/OSHA), would be notified to determine what future actions and/or remediation would be required to identify the extent and potential impact to human health.

Overall, with compliance to federal, state, and local regulations, and the incorporation of the proposed Project design features, impacts would be less than significant.

- c) *Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?*

Less Than Significant Impact. There are no schools within 0.25 miles of the project site and as noted above the project would be in compliance with federal, state, and local regulations. As such, all preventive measures would be in place to limit the hazardous emissions and waste in such a way that would not impact the neighboring school. As such impacts are expected to be less than significant.

- d) *Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?*

Less than Significant Impact. There are no superfund sites or hazardous waste and substances sites (Cortese List) within the project site boundaries (Geotracker, 2022). Additionally, there are no known hazardous materials sites within the projects boundaries as identified on the State of California Geotracker Map (State of California, 2021). Therefore, a less than significant impact associated with hazardous materials sites would occur.

- e) *For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?*

- f) *Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*

Less Than Significant Impact. The project is not anticipated to physically impede the existing emergency response plans, emergency vehicle access, or personnel access to the site. The project would not change local roadway circulation patterns or access. Emergency vehicle access must be maintained at all times throughout construction activities, in accordance with the County's routine/standard construction specifications. Further, construction activities would not be permitted to impede emergency access to any local roadways or surrounding properties. All driveways and internal site access roads would be constructed to accommodate all emergency vehicles and personnel. In April 2019, the San Joaquin County Board of Supervisors adopted an Emergency Operations Plan (EOP).²¹ The primary purpose of the EOP is to outline the County's all-hazard approach to emergency operations to protect the safety, health, and welfare of its citizens throughout all emergency management mission areas. Given that the proposed project is consistent with the site's current land use and zoning designations, the project would not physically interfere with the EOP. As such, the Project would have a less than significant impact associated with the impairment or interference with an adopted emergency response plan.

- g) *Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?*

Less Than Significant Impact. The Project site is not located within an area identified as having wildland fire potential. Therefore, the Project would not expose people or structures to a significant risk of loss, injury or death involving wildland fires. Additionally, according to CALFIRE, the Project site is not located in a Very High Fire Hazard Severity Zone (VHFHSZ) (CALFIRE, 2007). As such, the Project would not expose people or structures to a significant risk of loss, injury or death involving wildland fires. A Less Than Significant impact would occur.

Cumulative Impacts

The incremental effects of the proposed Project related to hazards and hazardous materials, if any, are anticipated to be minimal, and any effects would be site-specific. The Project is also not within an area classified as a VHFHSZ. Therefore, the proposed Project would not result in incremental effects to hazards or hazardous materials that could be compounded or increased when considered together with similar effects from other past, present, and reasonably foreseeable probable future projects. The proposed Project would not result in cumulatively considerable impacts to or from hazards or hazardous materials.

5.10 HYDROLOGY AND WATER QUALITY

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Issues	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
HYDROLOGY AND WATER QUALITY. Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?		X		
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?			X	
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i) Result in substantial erosion or siltation on- or off-site?		X		
ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?		X		
iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?		X		
iv) Impede or redirect flood flows?			X	
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?			X	
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?			X	

- a) *Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?*

Less Than Significant With Mitigation Incorporated. The project site falls within the San Joaquin Valley Groundwater Basin and Eastern San Joaquin sub basin. There are no surface waters or wetlands located on the project site per the National Wetlands Inventory (USFWS, 2022). During the early stages of project construction activities, topsoil would be exposed due to grading, trenching for utilities, and other standard ground-disturbing activities. After grading and prior to overlaying the ground surface with impervious surfaces and structures, the potential exists for wind and water erosion to discharge sediment and/or urban pollutants into stormwater runoff, which could adversely affect water quality downstream. The SWRCB regulates stormwater discharges associated with construction activities where clearing, grading, or excavation results in a land disturbance of one or more acres. The City's National Pollutant Discharge Elimination System (NPDES) permit requires applicants to show proof of coverage under the State's General Construction Permit prior to receipt of any construction permits. The State's General Construction Permit requires that subject projects must file a Notice of Intent with the SWRCB and develop a site-specific Storm Water Pollution Prevention Plan (SWPPP). A SWPPP describes Best Management Practices (BMPs) to control or minimize pollutants from entering stormwater and must address both grading/erosion impacts, and non-point source pollution impacts of the development project. BMPs include, but are not limited to, tracking controls, perimeter sediment controls, drain inlet protection, wind erosion/dust controls, and waste management control. Because the proposed project would disturb greater than one acre of land, the project would be subject to the requirements of the State's General Construction Permit.

Mitigation Measure MM HYD-1 would require the preparation of a SWPPP to ensure that the proposed project prepares and implements a SWPPP throughout the construction phase of the project. By implementing and maintaining proper BMPs, the potential for short-term sediment introduction should be minimized. The SWPPP (Mitigation Measure HYD-1) would reduce the potential for the proposed project to violate water quality standards during construction.

Post construction surface water at the site would be collected and run through a catch basin with an oil & gas separator, to a bioretention basin, and then to a proposed 18-inch storm drain that would connect to an existing stormwater drain in W Atherton Drive. To ensure that such a system is implemented, mitigation is proposed requiring the project applicant, as part of the stormwater quality control plan required under Mitigation Measure MM HYD- 2, to include a drainage plan that demonstrates attainment of pre-project runoff volumes and peak flows prior to release in the City's storm drain system.

With the above compliance with and implementation of MM HYD-1 and MM HYD-2 the project would have a less than significant impact related to water quality and water discharge requirements.

MM HYD-1: Prior to the issuance of grading or building permits for each proposed activity within the Master Plan area, the project applicant shall prepare and submit a Stormwater Pollution Prevention Plan (SWPPP) to the City of Manteca for approval that identifies specific actions and Best Management Practices (BMPs) to prevent stormwater pollution during construction activities. The SWPPP shall identify a practical sequence for BMP implementation, monitoring, and maintenance; site restoration; contingency measures; responsible parties; and agency contacts. The SWPPP shall include but not be limited to the following elements:

- Temporary erosion control measures shall be employed for disturbed areas.
- Specific measures shall be identified to protect the onsite open drainages during construction of the proposed project.
- No disturbed surfaces shall be left without erosion control measures in place during the winter and spring months.
- Sediment shall be retained onsite by a system of sediment basins, traps, or other appropriate measures.
- The construction contractor shall prepare Standard Operating Procedures for the handling of hazardous materials on the construction site to eliminate or reduce discharge of materials to storm drains.
- BMP performance and effectiveness shall be determined either by visual means where applicable (e.g., observation of above-normal sediment release), or by actual water sampling in cases where verification of contaminant reduction or elimination (such as inadvertent petroleum release) is required by the RWQCB to determine adequacy of the measure.
- In the event of significant construction delays or delays in final landscape installation, native grasses or other appropriate vegetative cover shall be established on the construction site as soon as possible after disturbance, as an interim erosion control measure throughout the wet season.

MM HYD-2: Prior to the issuance of building or grading permits for any development activities that occur pursuant to the Master Plan, the project applicant shall submit a stormwater quality control plan to the City of Manteca for review and approval. The plan shall include a detailed drainage plan and identify expected site-specific pollutants and required measures to treat those pollutants before they reach the municipal storm drain. The approved measures shall be incorporated into the proposed project. The plan will describe monitoring and performance measures and standards required in order to ensure water quality is adequately protected during operation of all proposed sites within the project area. Examples of stormwater pollution prevention measures and practices to be incorporated into the plan include but are not limited to:

- Strategically placed bioswales and landscaped areas that promote percolation of runoff
- Pervious pavement
- Roof drains that discharge to landscaped areas
- Trash enclosures with screen walls and roofs
- Stenciling on storm drains
- Curb cuts in parking areas to allow runoff to enter landscaped areas
- Rock-lined areas along landscaped areas in parking lots
- Catch basins
- Oil/water separators
- Regular sweeping of parking areas and cleaning of storm drainage facilities
- Employee training to inform maintenance personnel of stormwater pollution prevention measures

b) *Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?*

And,

e) *Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?*

Less Than Significant Impact. As previously mentioned, the project is within the San Joaquin Valley Groundwater Basin and Eastern San Joaquin sub basin. The Department of Water Resources has classified the Eastern San Joaquin County Groundwater Basin (ESJGCB) as a basin in a critical condition of overdraft. Groundwater overdraft in the ESJGCB and the City's groundwater withdrawal rate is of vital concern to the City as this poses a long-term risk to the reliability of the groundwater supply. According to the City's Urban Water Management Plan (UWMP), in order to reduce dependence on groundwater and ensure sustainable yields, the City's goal is to achieve a 53 percent to 47 percent annual balance of surface water to groundwater, respectively. The combined use of surface water and groundwater by the City is intended to reduce the groundwater withdrawal to the established sustainable yield of one acre-foot per year per acre (AFY/ac). The resulting reduction in groundwater withdrawal has stabilized groundwater levels in the Manteca area. As buildout of the General Plan continues over time, groundwater pumped would remain

limited to the safe yield of one AFY/ac, and projected future water demands would be met by a combination of groundwater, imported water, and recycled water.

The proposed project would generate an increase in water demand. However, such demand would be met through a combination of the aforementioned water sources. Development of the project site would not result in an increase in groundwater pumping because the City cannot exceed the sustainable groundwater pumping yield.

In addition, the project site constitutes a relatively small area compared to the size of the groundwater basin and, thus, does not constitute a substantial source of groundwater recharge. The project would allow for some continued infiltration through the proposed bio-retention basin and unpaved landscaping throughout the site. Therefore, the project would not substantially interfere with groundwater recharge.

Given that the proposed project is consistent with the site's General Plan land use and zoning designations, groundwater use associated with development of the project has been anticipated by the City and accounted for in regional planning efforts, including the projections included in the City's UWMP. Therefore, the proposed project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin. The proposed project would have a less than significant impact in this regard.

- c) *Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:*
- i) *Result in substantial erosion or siltation on- or off-site?*
 - ii) *Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?*
 - iii) *Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?*
 - iv) *Impede or redirect flood flows?*

Less Than Significant With Mitigation Incorporated. Project construction work could have an impact on surface water quality due to exposure of soils to potential erosion. Construction activities that would disturb more than an acre of land area would need to obtain a Construction General Permit, which would require preparation of a SWPPP that includes construction BMPs to control soil erosion, runoff, and waste discharges, including methods to clean up contaminants if they are released. Implementation of the SWPPP would reduce potential drainage pattern impacts from construction activities to a level that would be less than significant. In addition, the proposed project would not violate any federal, state, or local water quality standards or waste discharge

requirements. With the above compliance with and implementation of MM HYD-1 and MM HYD-2 the project would have a less than significant impact related to soil erosion, increased surface water runoff, and polluted surface water runoff.

Specific to the proposed gas station, the Maverik site includes 2 bioretention basins, one in the southeast corner 1,240 square feet and 1.5 ft deep, and the other of the southwest side 2,150 square feet and 1.6 ft deep. Stormwater at the site would be collected and run through a catch basin with an oil & gas separator, to a bioretention basin, and then to a proposed 18-inch storm drain that would connect to an existing stormwater drain in W Atherton Drive.

The project site falls within FEMA's National Flood Hazard FIRM Panel 06077C0620F, Zone X Area with Reduced Flood Risk Due to Levee (FEMA, 2020). The north west portion of the project site all overlaps with a Letter of Map Revision (LOMR) 11-09-3002P area effective 9/2/2011. This states that in the unlikely case of levee overtopping or failure, future developments upstream could experience increase flood discharges and potentially flood hazards. Overall, with the project location in an area with reduced flood risk due to a levee the project would not impede or redirect flood flow which would result in a less than significant impact.

In conclusion, the proposed project would not substantially alter the existing drainage pattern of the site or area in a manner which would result in erosion, siltation, or flooding on- or off-site, create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems, or provide substantial additional sources of polluted runoff. Consequently, implementation of the proposed project would result in a less-than-significant impact.

d) *In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?*

Less Than Significant Impact. The Project site is located around 60 miles inland from the Pacific Ocean. As such, the potential for the Project site to be inundated by a tsunami is negligible. No steep slopes are located in the Project vicinity; therefore, the risk of mudflow is also negligible. Therefore, impacts would be less than significant.

Cumulative Impacts

The potential impacts related to hydrology and storm water runoff are typically site specific and site specific BMPs are implemented at the project level. The analysis above determined that the implementation of the proposed project would not result in significant impacts. In regard to proposed project impacts that would be considered less than significant, such impacts are not expected to result in compounded or increased impacts when considered together with similar effects from other past, present, and reasonably foreseeable probable future projects, as other projects would be subject to similar laws and requirements regarding hydrology practices.

Projects would be required to adhere to applicable General Plan goals, policies, and action statements; the City of Manteca's Municipal Zoning Code; the City's Standard Conditions of Approval; and the City's

stormwater management guidelines regarding stormwater runoff and infrastructure. In addition, other projects would be required to implement stormwater pollution best management practices during construction and design measures to reduce water quality impacts and comply with the NPDES Municipal Regional Permit. Future developments in the watershed would also be required to comply with the SWRCB and RWQCB. Depending on the size of future projects, they would be required to obtain and comply with all required water quality permits and the Water Quality Control Plan, as needed and prepare and implement SWPPPS, implement construction BMPs, including BMPs to minimize runoff, erosion, and storm water pollution, comply with other applicable requirements. As part of these requirements, projects would be required to implement and maintain source controls, and treatment measures to minimize polluted discharge and prevent increases in runoff flows that could substantially decrease water quality. Conformance to these measures would minimize runoff from those sites and reduce contamination of runoff with pollutants. Therefore, related projects are not expected to cause substantial increases in storm water pollution. With compliance with State and local mandates, cumulative impacts would be less than significant, and project impacts would not be cumulatively considerable.

5.11 LAND USE AND PLANNING

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Issues	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
LAND USE AND PLANNING. Would the project:				
a) Physically divide an established community?			X	
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?			X	

a) *Physically divide an established community?*

Less Than Significant Impact. An example of a project that has the potential to divide an established community includes the construction of a new freeway or highway through an established neighborhood. The project proposes a commercial mixed-use development. The project would be located near already established residential community to the south, bound by SR 120 to the north, and the general area is developing with additional general commercial or low-density residential uses. Given the project's nature, scope, and location, the project would not physically divide an established community. A less than significant Impact would occur in this regard.

b) *Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?*

Less Than Significant Impact. The Crossing project site is proposed on land currently designated General Commercial in the General Plan Land Use Map and under the Zoning District General Commercial as identified in the Municipal Code. The Project would be consistent with the City's zoning and General Plan land use designation upon approval of individual project specific use permits dependent on commercial use. Therefore, the Project would not conflict with the City's land use plan, policy, or regulation and therefore, would be less than significant.

Cumulative Impacts

Implementation of the Project would not create a significant cumulative impact to the surrounding region since its surrounding area is planned for general commercial use. As a result, no cumulative impacts related to land use and planning would occur.

5.12 MINERAL RESOURCES

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Issues	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
MINERAL RESOURCES. Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?			X	
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?			X	

- a) *Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?*

Less Than Significant Impact. There are no wells located on the project site. The closest wells within a mile of the project site are all dry hole wells that are plugged and not used. The closest Oil and Gas Field in the McMullin Ranch Gas located approximately 1.4 miles south of the project site. Overall, there are no known available mineral resources on the project site and therefore impacts from the proposed project would be less than significant.

- b) *Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?*

Less Than Significant Impact. The State of California has identified lands in the General Plan Study Area, near the San Joaquin River, as areas of significant mineral resources. In particular, sand deposits in these areas are considered to be of regional significance. However, Brown Sand and Gravel, Incorporated, the only operator within the Study Area (Oakwood Lake Pit), has completed mining operations. Oakwood Lake Resort has been created from reclaimed mined lands. The proposed project would not impact these resources (City of Manteca, 2003).

Additionally, The Surface Mining and Reclamation Act of 1975 (SMARA) requires classification of land into MRZs according to the known or inferred mineral potential of the area. Under SMARA, areas are categorized into MRZs as follows:

- **MRZ-1** Areas where the available geologic information indicates no significant mineral deposits or a minimal likelihood of significant mineral deposits.
- **MRZ-2** Areas where the available geologic information indicates that there are significant mineral deposits or that there is a likelihood of significant mineral deposits. However, the significance of the deposit is undetermined.

- **MRZ-3** Areas where the available geologic information indicates that mineral deposits are inferred to exist; however, the significance of the deposit is undetermined.
- **MRZ-4** Areas where there is not enough information available to determine the presence or absence of mineral deposits.

Designated by the California Geological Survey, the project site falls within MRZ-1 as having no significant mineral deposits present (CGS, 2012). Therefore, the development of the proposed project would not result in the loss of availability of a locally-important mineral resource recovery site and impacts would be less than significant.

Cumulative Impacts

Implementation of the Project would not create a significant cumulative impact to the surrounding region as there is no loss of a known mineral resource on the project site or significant mineral deposits present on the project site. As a result, no cumulative impacts related to mineral resources would occur.

5.13 NOISE

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Issues	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
NOISE. Would the project result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			X	
b) Generation of excessive groundborne vibration or groundborne noise levels?			X	
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?			X	

REGULATORY SETTING

State

California Government Code

California Government Code Section 65302(f) mandates that the legislative body of each county and city adopt a noise element as part of its comprehensive general plan. The local noise element must recognize the land use compatibility guidelines established by the State Department of Health Services. The guidelines rank noise land use compatibility in terms of “normally acceptable”, “conditionally acceptable”, “normally unacceptable”, and “clearly unacceptable” noise levels for various land use types. Single-family homes are “normally acceptable” in exterior noise environments up to 60 CNEL and “conditionally acceptable” up to 70 CNEL. Multiple-family residential uses are “normally acceptable” up to 65 CNEL and “conditionally acceptable” up to 70 CNEL. Schools, libraries, and churches are “normally acceptable” up to 70 CNEL, as are office buildings and business, commercial, and professional uses.

Title 24 – Building Code

The State’s noise insulation standards are codified in the California Code of Regulations, Title 24: Part 1, Building Standards Administrative Code, and Part 2, California Building Code. These noise standards are applied to new construction in California for interior noise compatibility from exterior noise sources. The regulations specify that acoustical studies must be prepared when noise-sensitive structures, such as residential buildings, schools, or hospitals, are located near major transportation noise sources, and where such noise sources create an exterior noise level of 65 dBA CNEL or higher. Acoustical studies that

accompany building plans must demonstrate that the structure has been designed to limit interior noise in habitable rooms to acceptable noise levels. For new multi-family residential buildings, the acceptable interior noise limit for new construction is 45 dBA CNEL.

Local

City of Manteca General Plan

The Manteca General Plan identifies goals, policies, and implementations in the Noise Element. The Noise Element provides a basis for comprehensive local programs to regulate environmental noise and protect citizens from excessive exposure. *Table 11: Maximum Allowable Noise Exposure from Mobile Noise Sources* lists land uses and associated maximum allowable mobile noise in outdoor activity areas and indoor spaces. Additionally, *Table 12: Performance Standards for Stationary Noise Sources or Project Affected by Stationary Noise Sources* lists daytime and nighttime noise level standards for stationary noise sources.

Table 11: Maximum Allowable Noise Exposure from Mobile Noise Sources

Land Use ⁴	Outdoor Activity Areas Up to 65 ¹	Interior Spaces	
		Ldn/CNEL, dBA	Leq, dBA ⁴
Residential	60 ²	45	-
Transient Lodging	60 ²	45	-
Hospitals, Nursing Homes	60 ²	45	
Theatres, Auditoriums	-	-	35
Churches, Music Halls	60	-	40
Office Buildings	65	-	45
Schools, Libraries, Museums	-	-	45
Playgrounds, Neighborhood parks	70	-	-
<p>1. Outdoor activity areas for residential development are considered to be backyard patios or decks of single family dwellings, and the common areas where people generally congregate for multi-family developments. Outdoor activity areas for non-residential developments are considered to be those common areas where people generally congregate, including pedestrian plazas, seating areas, and outside lunch facilities. Where the location of outdoor activity areas is unknown, the exterior noise level standard shall be applied to the property line of the receiving land use.</p> <p>2. In areas where it is not possible to reduce exterior noise levels to 60 dB L_{dn} or below using a practical application of the best noise-reduction technology, an exterior noise level of up to 65 L_{dn} will be allowed.</p> <p>3. Determined for a typical worst-case hour during periods of use.</p> <p>4. Where a proposed use is not specifically listed on the table, the use shall comply with the noise exposure standards for the nearest similar use as determined by the City.</p>			
Source: City of Manteca General Plan Noise Element Table 9-1: Maximum Allowable Noise Exposure from Mobile Noise Sources, 2003			

Table 12: Performance Standards for Stationary Noise Sources or Project Affected by Stationary Noise Sources

Noise Level Descriptor	Daytime	Nighttime
	7 AM to 10 PM	10 PM to 7 AM
Hourly L_{eq} , dBA	55	45
Maximum Level, dB	70	65
1. Each of the noise levels specified above should be lowered by 5 dB for simple noise tones, noises consisting primarily of speech or music, or recurring impulsive noises. Such noises are generally considered to be particularly annoying and are a primary source of noise complaints. 2. No standards have been included for interior noise levels. Standard construction practices should, with the exterior noise levels identified, result in acceptable interior noise levels		
Source: City of Manteca General Plan Safety Element Table 9-2: Performance Standards for Stationary Noise Sources or Project Affected by Stationary Noise Sources, 2003		

The Manteca General Plan Noise Element includes the following policies for noise:

- Policy N-P-1:** Areas within Manteca exposed to existing or projected exterior noise levels from mobile noise sources exceeding the performance standards in Table 9-1 shall be designated as noise-impacted areas.
- Policy N-P-2:** New development of residential or other noise-sensitive land uses will not be permitted in noise-impacted areas unless effective mitigation measures are incorporated into the project design to satisfy the performance standards in Table 9-1.
- Policy N-P-3:** The City may permit the development of new noise-sensitive uses only where the noise level due to fixed (non-transportation) noise sources satisfies the noise level standards of Table 9-2. Noise mitigation may be required to meet Table 9-2 performance standards.
- Policy N-P-4:** The City shall require stationary noise sources proposed adjacent to noise sensitive uses to be mitigated so as to not exceed the noise level performance standards in Table 9-2.
- Policy N-P-5:** In accord with the Table 9-2 standards, the City shall regulate construction-related noise impacts on adjacent uses.
- Policy N-P-6:** Where the development of residential or other noise-sensitive land use is proposed for a noise-impacted area or where the development of a stationary noise source is proposed in the vicinity of noise sensitive uses, an acoustical analysis is required as part of the environmental review process so that noise mitigation may be considered in the project design. The acoustical analysis shall:

- Be the responsibility of the applicant.
- Be prepared by a qualified acoustical consultant experienced in the fields of environmental noise assessment and architectural acoustics.
- Include representative noise level measurements with sufficient sampling periods and locations to adequately describe local conditions and the predominant noise sources.
- Estimate existing and projected (20 years) noise levels in terms of the standards of Table S-1 or Table S-2, and compare those levels to the adopted policies of the Noise Element.
- Recommend appropriate mitigation measures to achieve compliance with the adopted policies and standards of the Noise Element.
- Estimate noise exposure after the prescribed mitigation measures have been implemented.
- If necessary, describe a post-project assessment program to monitor the effectiveness of the proposed mitigation measures.

Policy N-P-7: Noise level criteria applied to land uses other than residential or other noise-sensitive uses shall be consistent with noise performance levels of Table 9-1 and Table 9-2.

Policy N-P-8: The City shall enforce the Sound Transmission Control Standards of the California Building Code concerning the construction of new multiple occupancy dwellings such as hotels, apartments, and condominiums.

Policy N-P-11: For residential development backing on to a freeway or railroad right-of-way, the developer shall be required to build a sound barrier wall, and provide for other appropriate mitigation measures, to satisfy the performance standards in Table 9-1.

Implementation N-I-1: New development in residential areas with an actual or projected exterior noise level of greater than 60 dB Ldn will be conditioned to use mitigation measures to reduce exterior noise levels to less than or equal to 60 dB Ldn.

Implementation N-I-3: In making a determination of impact under the California Environmental Quality Act (CEQA), a substantial increase will occur if ambient noise levels are increased by 10 dB or more. An increase from 5-10 dB may be substantial. Factors to be considered in determining the significance of increases from 5-10 dB include:

- the resulting noise levels
- the duration and frequency of the noise
- the number of people affected or the land use designation of the affected receptor sites
- public reactions or controversy as demonstrated at workshops or hearings, or by correspondence

- prior CEQA determinations by other agencies specific to the project

Implementation N-I-4: Control noise at the source through use of insulation, berms, building design and orientation, buffer space, staggered operating hours and other techniques. Use noise barriers to attenuate noise to acceptable levels.

City of Manteca Municipal Code

According to Manteca Municipal Code, Section 17.58.050, Noise Standards, construction activities that create a noise disturbance across a residential property line daily between the hours of 7:00 p.m. and 7:00 a.m. are prohibited, except for emergency work of public service utilities. The Municipal Code does not establish quantitative noise limits for construction activities in the City. *Table 13: City of Manteca Zoning Ordinance Noise Standards* shows the City of Manteca standards for maximum noise level at the property line or in the M-1 and M-2 districts, at a point 500 feet from exterior wall of the use or at the property line of the use, whichever is less.

Table 13: City of Manteca Zoning Ordinance Noise Standards

Receiving Land Use Category	Time Period	Maximum Allowable Noise Levels (Ldn/CNEL, dB)
Single-Family and Limited Multiple-Family	10 pm – 7 am	50
	7 am – 10 pm	60
Multiple-Family, Public Institution, and Neighborhood Commercial	10 pm – 7 am	55
	7 am – 10 pm	60
Medium and Heavy Commercial	10 pm – 7 am	60
	7 am – 10 pm	65
Light Industrial	Anytime	70
Heavy Industrial	Anytime	75
Source: City of Manteca Municipal Code, Table 17.58.050-1		

Section 17.58.050 D states that construction activities are exempt from Section 17.58.050, when conducted as part of an approved Building Permit, except as prohibited in Subsection 17.58.050(E)(1) (Prohibited Activities) below.

1. Construction Noise. Operating or causing the operation of tools or equipment on private property used in alteration, construction, demolition, drilling, or repair work daily between the hours of 7:00 p.m. and 7:00 a.m., so that the sound creates a noise disturbance across a residential property line, except for emergency work of public service utilities

The Municipal Code establishes that exterior noise levels shall be measured with a sound level meter and associated octave band analyzer meeting the American National Standards Institute's standards S1.4-1971 for Type 1 or Type 2 sound level meters or an instrument and the associated recording and analyzing equipment that will provide equivalent data. When measuring the noise level, the corrections provided in *Table 14: Noise Level Corrections* shall be applied.

Table 14: Noise Level Corrections

Category	Correction (decibels)
Daytime operation only (7 a.m. – 7 p.m.)	+5
Noise source operates less than	
20% of any one-hour period	+5
5% of any one-hour period	+10
1% of any one-hour period	+15
Noise of impulsive character (e.g., hammering)	-5
Noise rising or falling in pitch or volume (e.g., hum, screech)	-5
Source: City of Manteca Municipal Code, Table 17.58.050-2	

Further, Section 9.52.040 F states that loading, unloading, opening, closing or other handling of boxes, crates, containers, building materials, garbage cans or similar objects are prohibited between the hours of 10 p.m. and 8 a.m. in such a manner as to cause noise disturbance, except for solid waste collection.

EXISTING CONDITIONS

Existing Noise Sources

The City of Manteca is impacted by various noise sources. Mobile sources of noise, especially cars and trucks, are the most common and significant sources of noise in the City. Other sources of noise are the various land uses (i.e., residential, commercial, institutional, and recreational and parks activities) throughout the City that generate stationary-source noise.

Noise Measurements

To determine ambient noise levels in the project area, four short-term (10-minute) noise measurements were taken using a Larson Davis SoundExpert LxT Type I integrating sound level meter on January 26, 2022; refer to Appendix H for existing noise measurement data.

As shown in **Figure 6, Noise Measurement Locations**, short-term measurement 1 (ST-1) was taken to represent the ambient noise level to the east of the project site on South Airport Way, ST-2 and ST-3 were taken to represent existing noise levels at the residential uses to the south and southeast of the project site, respectively, and ST-4 was taken to represent the existing noise level at the residential uses to the west of the project site along West Atherton Drive. The primary noise source during the noise measurements was traffic on South Airport Way, West Atherton, and State Route 120 (SR-120). *Table 15: Noise Measurements* provides the ambient noise levels measured at these locations.

Table 15: Noise Measurements

Site No.	Location	L _{eq} (dBA)	L _{min} (dBA)	L _{max} (dBA)	L _{peak} (dBA)	Time	Date
ST-1	South Airport Way	67.9	52.7	83.1	94.6	11:49 a.m. to 11:59 a.m.	01/26/2022
ST-2	Sage Sparrow Avenue	63.8	51.8	76.0	99.3	12:04 p.m. to 12:14 p.m.	01/26/2022
ST-3	Langum Way	48.8	43.4	64.5	83.3	12:21 p.m. to 12:31 p.m.	01/26/2022
ST-4	West Atherton Drive	69.9	41.9	87.0	111.3	12:36 p.m. to 12:46 p.m.	01/26/2022
Source: Noise Measurements taken by Kimley-Horn on January 26 th in 2022.							

Existing Mobile Noise

Existing roadway noise levels were calculated for the roadway segments in the project vicinity. This task was accomplished using the Federal Highway Administration (FHWA) Highway Traffic Noise Prediction Model (FHWA-RD-77-108) and existing traffic volumes from the 2021 General Plan Draft EIR. Existing traffic volumes were obtained from the traffic modeling performed for the General Plan study area. Day/night traffic distributions were based upon continuous hourly noise measurement data. Caltrans vehicle truck counts were obtained for CA-99 and CA-120. Using these data sources and the FHWA traffic noise prediction methodology, traffic noise levels were calculated for existing (2019) conditions. The closest roadway study segment to the project site is Airport Way south of SR-120 eastbound ramps, which has approximately 17,840 average daily trips.

Existing Stationary Noise

The primary sources of stationary noise in the project vicinity are those associated with the operations of nearby residential uses to the west and south of the site, existing mixed-used commercial and industrial to the north of the project site, and vacant land to the west and south. The noise associated with these sources may represent a single-event noise occurrence, short-term noise, or long-term/continuous noise.

Sensitive Receptors

Noise exposure standards and guidelines for various types of land uses reflect the varying noise sensitivities associated with each of these uses. Residences, hospitals, schools, guest lodging, libraries, and churches are treated as the most sensitive to noise intrusion and therefore have more stringent noise exposure targets than do other uses, such as manufacturing or agricultural uses that are not subject to impacts such as sleep disturbance. The surrounding land uses are predominantly residential, with commercial uses to the north beyond SR-120. As shown in *Table 16: Sensitive Receptors* sensitive receptors near the project site include single-family residences, parks, and religious centers. These distances are from the project site to the sensitive receptor property line.

Table 16: Sensitive Receptors

Receptor Description	Distance and Direction from the Project Site
Single-family residential	80 feet southwest
Single-family residential	170 feet southeast
Bella Vista Park	500 feet west
Gurdwara Gurmat Parkash Manteca (religious establishment)	1500 feet southeast

ENVIRONMENTAL IMPACTS

- a) *Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?*

Less Than Significant Impact.

Construction

Construction noise typically occurs intermittently and varies depending on the nature or phase of construction (e.g. land clearing, grading, excavation, paving). Noise generated by construction equipment, including earth movers, material handlers, and portable generators, can reach high levels. During construction, exterior noise levels could affect the residential neighborhoods surrounding the construction site. Project construction would occur approximately 100 feet from the nearest sensitive receptor to the west. However, construction activities would occur throughout the project site and would not be concentrated at a single point near sensitive receptors. Noise levels typically attenuate (or drop off) at a rate of 6 dB per doubling of distance from point sources, such as industrial machinery. During construction, exterior noise levels could affect the residential neighborhoods near the construction site.

Construction activities associated with development of the project would include some demolition, site preparation, grading, paving, building construction, and architectural coating. Such activities may require graders, scrapers, and tractors during demolition and site preparation; graders, dozers, and tractors during grading; cranes, forklifts, generators, tractors, and welders during building construction; pavers, rollers, mixers, tractors, and paving equipment during paving; and air compressors during architectural coating. Grading and excavation phases of project construction tend to be the shortest in duration and create the highest construction noise levels due to the operation of heavy equipment required to complete these activities. It should be noted that only a limited amount of equipment can operate near a given location at a particular time. Equipment typically used during this stage includes heavy-duty trucks, backhoes, bulldozers, excavators, front-end loaders, and scrapers. Operating cycles for these types of construction equipment may involve one or two minutes of full-power operation followed by three to four minutes at lower power settings. Other primary sources of noise would be shorter-duration incidents, such as dropping large pieces of equipment or the hydraulic movement of machinery lifts, which would last less than one minute. According to the applicant, no pile-driving would be

required during construction and as such a project condition of approval will be included in the project permit to reflect the project's proposed construction.

Noise generated by construction equipment, including earth movers, material handlers, and portable generators, can reach high levels. Typical noise levels associated with individual construction equipment are listed in *Table 17: Typical Construction Noise Levels*.

Table 17: Typical Construction Noise Levels

Equipment	Maximum Noise Level (dBA) from Source ¹
	50 feet (reference level)
Air Compressor	80
Backhoe	80
Compactor	82
Concrete Mixer	85
Concrete Pump	82
Concrete Vibrator	76
Crane, Mobile	83
Dozer	85
Generator ²	56
Grader	85
Impact Wrench	85
Jack Hammer	88
Loader	80
Paver	85
Pneumatic Tool	85
Pump	77
Roller	85
Saw	76
Scarifier	83
Scraper	85
Shovel	82
Truck	84
1. Calculated using the inverse square law formula for sound attenuation: $dBA_2 = dBA_1 + 20\log(d_1/d_2)$ Where: $QWdBA_2$ = estimated noise level at receptor; dBA_1 = reference noise level; d_1 = reference distance; d_2 = receptor location distance.	
2. Generator would include CAT XQ60 Rental Generator Set.	
Source: Federal Transit Administration, <i>Transit Noise and Vibration Impact Assessment Manual</i> , September 2018.	

Policy N-P-5 of the City's General Plan limits hourly average noise levels and maximum instantaneous noise levels due to construction activities to 50 dBA L_{eq} and 70 dBA L_{max} , respectively, during daytime hours between 7:00 a.m. and 10:00 p.m. Additionally, Implementation N-I-3 states that a 10 dBA or more increase over ambient noise levels would be considered a significant CEQA

impact. Further, Section 17.58.050(E) of the City's Municipal Code limits allowable construction hours to between 7:00 a.m. and 7:00 p.m.

Noise impacts for mobile construction equipment are typically assessed as emanating from the center of the equipment activity or construction site.⁸ For the proposed project, this center point would be approximately 275 feet from the nearest sensitive receptor property line. As shown in *Table 18* noise maximum levels are below 73 dBA at 275 feet, the distance to the nearest sensitive receptor west of the site. The highest anticipated construction noise level of 73 dBA at 275 feet is expected to occur during the demolition phase. These sensitive uses may be exposed to elevated noise levels during project construction. The Federal Highway Administration (FHWA) Roadway Construction Noise Model (RCNM) was used to calculate noise levels during construction activities; refer to Appendix H: Noise Data. RCNM is a computer program used to assess construction noise impacts and allows for user-defined construction equipment and user-defined noise limit criteria. Noise levels were calculated for each construction phase and are based on the equipment used, distance to the nearest property/receptor, and acoustical use factor for equipment.

The noise levels calculated in *Table 18: Project Construction Noise Levels*, show estimated exterior construction noise at the closest receptors to the south and west of the project site. Based on calculations using the RCNM model, construction noise levels would range from approximately 53.1 dBA L_{eq} and 65.4 dBA L_{eq} , and 57.1 dBA L_{max} to 69.8 dBA L_{max} at the nearest sensitive receptors; see *Table 16*.

As shown in *Table 18*, the loudest noise levels would be 65.4 dBA L_{eq} and 69.8 L_{max} at the nearest residential uses to the west, which would exceed City's hourly average threshold of 50 dBA L_{eq} and maximum instantaneous threshold of 70 dBA L_{max} . However, Section 17.58.050(D) of the municipal code states that construction activities are exempt from the City's Noise Ordinance during allowable hours, between 7:00 a.m. and 7:00 p.m., when conducted as part of an approved Building Permit. Considering project construction activities would be required to comply with the City's regulations, construction activities would be exempt from the General Plan noise level limits. As a result, a less-than-significant impact would occur related to creation of a substantial temporary or periodic increase in ambient noise levels in the project vicinity.

⁸ For the purposes of this analysis, the construction area is defined as the center of the project site per the methodology in the FTA Transit Noise and Vibration Impact Assessment Manual (September 2018). Although some construction activities may occur at distances closer than 275 feet from the nearest properties, construction equipment would be dispersed throughout the project site during various construction activities. Therefore, the center of the project site represents the most appropriate distance based on the sporadic nature of construction activities.

Table 18: Project Construction Noise Levels

Construction Phase	Receptor Location			Modeled Exterior Noise Level (dBA L _{eq}) ^{2,3}	Noise Threshold (dBA L _{eq}) ⁴	Exceeded?	Modeled Exterior Noise Level (dBA L _{max}) ^{2,3}	Noise Threshold (dBA L _{eq}) ⁴	Exceeded?
	Land Use	Direction	Distance (feet) ¹						
Demolition	Residential	West	275	64.8	50	Yes	69.8	70	No
	Residential	South	300	64.0		Yes	69.0		No
Site Preparation	Residential	West	275	62.2		Yes	64.2		No
	Residential	South	300	61.5		Yes	63.4		No
Grading	Residential	West	275	65.4		Yes	65.2		No
	Residential	South	300	64.6		Yes	64.4		No
Building Construction	Residential	West	275	63.0		Yes	64.2		No
	Residential	South	300	62.3		Yes	63.4		No
Paving	Residential	West	275	56.9		Yes	60.2		No
	Residential	South	300	56.1		Yes	59.4		No
Architectural Coating	Residential	West	275	53.9		Yes	57.9		No
	Residential	South	300	53.1		Yes	57.1		No
Notes: 1. Distance is from the nearest receptor to the main construction activity area on the project site. Not all equipment would operate at the closest distance to the receptor. 2. Modeled noise levels conservatively assume the simultaneous operation of all pieces of equipment. 3. Modeled noise levels include a 5 dB reduction for the existing concrete wall located between the residences and W. Atherton Way. 4. Policy N-P-5 of the City's General Plan limits hourly average noise levels and maximum instantaneous noise levels due to construction activities to 50 dBA L _{eq} and 70 dBA L _{max} , respectively, during daytime hours between 7:00 a.m. and 10:00 p.m.									
Source: Federal Highway Administration, <i>Roadway Construction Noise Model</i> , 2006. Refer to Appendix H: Noise Data for noise modeling results.									

Although project construction would occur during normal daytime hours and would not be subject to the City's Municipal Code noise standards, construction activities could result in a noticeable increase in ambient noise levels in the area. Therefore, prior to the issuance of any grading permits, the project applicant shall submit and implement a Construction Noise Management Plan that specifies hours of construction, noise and vibration minimization measures, posting and notification of construction schedules, equipment to be used, and designation of a noise disturbance coordinator. The noise disturbance coordinator shall respond to neighborhood complaints and shall be in place prior to the start of construction and implemented during construction to reduce noise impacts on neighboring residents and other uses. The noise logistic plan shall be submitted to the Community Development Department Director or Director's designee of the Director of the Community Development Department prior to the issuance of any grading permits. The Construction Noise Management Plan would help to reduce noise levels associated with the construction of the proposed project. Thus, the proposed project would have a less than significant impact in this regard.

Construction Noise Management Plan

Noise reduction measures may include, but are not limited to, the following:

- a) Equipment and trucks used for project construction shall utilize the best available noise control techniques (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures and acoustically attenuating shields or shrouds) wherever feasible.
- b) Except as provided herein, impact tools (e.g., jack hammers, pavement breakers, and rock drills) used for project construction shall be hydraulically or electrically powered to avoid noise associated with compressed air exhaust from pneumatically powered tools. However, where use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used. This muffler can lower noise levels from the exhaust by up to about 10 dBA. External jackets on the tools themselves shall be used, if such jackets are commercially available. this could achieve a reduction of 5 dBA. Quieter procedures shall be used, such as drills rather than impact equipment, whenever such procedures are available and consistent with construction procedures.
- c) Temporary power poles shall be used instead of generators where feasible.
- d) Stationary noise sources shall be located as far from adjacent properties as possible, and they shall be muffled and enclosed within temporary sheds, incorporate insulation barriers, or use other measures as determined by the City of provide equivalent noise reduction.
- e) The noisiest phases of construction shall be limited to less than 10 days at a time. Exceptions may be allowed if the City determines an extension is necessary and all available noise reduction controls are implemented.
- f) Delivery of materials shall observe the hours of operation described above.
- g) Truck traffic should avoid residential areas to the extent possible.

Construction Traffic Noise

Construction is estimated to be approximately 16 months. Construction noise may be generated by large trucks moving materials to and from the project site. Large trucks would be necessary to deliver building materials as well as remove dump materials. Excavation, cut, and fill would be required. Grading over the entire site would consist of 32,700 cubic yards of balanced cut and fill. Based on the California Emissions Estimator Model (CalEEMod) default assumptions for this

project, the project would generate the highest number of daily trips during the demolition and construction phases. The model estimates that the project would generate up to 15 worker trips and 10 daily hauling trips (200 hauling trips over 20 days) for demolition for a total of approximately 25 daily vehicle trips during demolition. During the site preparation phase there would be approximately 18 daily worker trips. Building construction would have 222 daily worker trips and 90 daily vendor trips.

According to Implementation Measure N-I-3 of the City's General Plan, a significant permanent noise increase would occur if the project would increase noise levels at noise-sensitive receptors by 5 dBA Ldn or more. For reference, a 5 dBA Ldn noise increase would be expected if the project would triple existing traffic volumes along a roadway. Airport Way south of SR-120 eastbound ramps has approximately 17,840 average daily trips.⁹ A maximum of 312 daily project construction trips (total of 222 daily worker trips and 90 daily vendor trips) would not triple the existing traffic volume per day. Therefore, construction related traffic noise would not be noticeable and would not create a significant noise impact. Implementation of the Construction Noise Management Plan would also help reduce construction traffic noise levels, as truck traffic would be routed to avoid residential areas where feasible.

Operations

Implementation of the project would create new sources of noise in the project vicinity. The major noise sources associated with the project that would potentially impact existing and future nearby residences include the following:

- Off-site traffic noise;
- Mechanical equipment (i.e., trash compactors, air conditioners, etc.);
- Gas dispensing activities;
- Restaurant and commercial retail activities (e.g., outdoor seating and dining areas, vehicle queuing, speaker systems);
- Delivery trucks activities at the loading areas (i.e., maneuvering and idling trucks, loading/unloading, and equipment noise);
- Parking areas (i.e., car door slamming, car radios, engine start-up, and car pass-by); and
- Landscape maintenance activities.

The closest sensitive receptors are located approximately 100 feet to the west. Policy N-P-4 of the City's General Plan establishes the noise level requirements as thresholds for stationary noise sources. *Table 12* limits hourly average noise levels from stationary sources to 55 dBA L_{eq} between the hours of 7:00 a.m. and 10:00 p.m. and to 45 dBA L_{eq} between the hours of 10:00 p.m. and 7:00 a.m. Further, maximum instantaneous noise levels shall not exceed 70 dBA L_{max} between the hours of 7:00 a.m. and 10:00 p.m. and 65 dBA L_{max} between the hours of 10:00 p.m. and 7:00 a.m. These thresholds shall be enforced on the property lines of the adjacent receiving uses. Further, *Table 17.58.050-1* of the City's Municipal Code (*Table 13* above) limits hourly average noise levels to 60 dBA CNEL between the hours of 7:00 a.m. and 10:00 p.m. and to 50 dBA CNEL between the hours

⁹ City of Manteca, *General Plan Draft EIR*, 2021.

of 10:00 p.m. and 7:00 a.m. at single family residential land uses. Table 17.58.050-2 of the Municipal Code (*Table 14* above) provides noise level corrections for Table 17.58.050-1 (*Table 13*), which include adding 15 dB to the Municipal Code thresholds for noises occurring for less than 1% of any one hour, adding 10 dB for sources occurring less than 5% of any one-hour, and adding 5 dB for source occurring less than 20% of any hour.

Traffic Noise

Implementation of the project would generate increased traffic volumes along study roadway segments. The project is expected to generate a net of 10,944 average daily trips, which would result in noise increases on project area roadways. According to Implementation Measure N-I-3 of the City's General Plan, a significant permanent noise increase would occur if the project would increase noise levels at noise-sensitive receptors by 5 dBA Ldn or more. For reference, a 5 dBA Ldn noise increase would be expected if the project would triple existing traffic volumes along a roadway. Airport Way south of SR-120 eastbound ramps has approximately 17,840 average daily trips.¹⁰ Therefore, a maximum of 10,944 daily project trips would not triple the existing traffic volume per day. Operational related traffic noise would not be noticeable and would not create a significant noise impact.

Stationary Noise Sources

Implementation of the project would create new sources of noise in the project vicinity from mechanical equipment, truck loading areas, parking lot noise, and landscape maintenance. *Table 19: Operational Noise Levels*, shows the noise levels generated by various stationary noise sources and the resulting noise level at the nearest receiver. *Table 19* also shows the project's compliance with the General Plan Policy N-P-4, as well as the Municipal Code. Each stationary source is discussed below.

Mechanical Equipment

Regarding mechanical equipment, the project would generate stationary-source noise associated with heating, ventilation, and air conditioning (HVAC) units. HVAC units typically generate noise levels of approximately 52 dBA at 50 feet.¹¹ Additionally, the project would include backup generators. *Table 19* shows that mechanical equipment would not exceed the City's General Plan standards in Policy N-P-4 and Section 17.58.050 of the Municipal Code.

Parking Lot and Gas Station Activities

According to the site plan, 670 parking spaces are proposed as part of the project. 38 of the 670 parking spaces would be located to the east and south of the convenience store, facing the existing residences to the south. Additionally, 14 standard fuel pumps and eight diesel pumps would also include similar noise sources as parking spaces, which would include vehicular circulation, louder engines, car alarms, door slams, and human voices. These sources typically generate noise levels ranging from 53 to 63 dBA at a distance of 50 feet. *Table 19* shows that parking lot and gas station activities would not exceed the City's General Plan standards in Policy N-P-4 and Section 17.58.050 of the Municipal Code.

¹⁰ City of Manteca, *General Plan Draft EIR*, 2021.

¹¹ Elliott H. Berger, Rick Neitzel, and Cynthia A. Kladden, *Noise Navigator Sound Level Database with Over 1700 Measurement Values*, July 6, 2010.

Loading Area Noise

The project is a commercial development that would include deliveries. The primary noise associated with deliveries is the arrival and departure of trucks. Operations of the proposed project would potentially require a mixture of deliveries from vans, light trucks, and heavy-duty trucks. Normal deliveries typically occur during daytime hours. During loading and unloading activities, noise would be generated by the trucks' diesel engines, exhaust systems, and brakes during low gear shifting' braking activities; backing up toward the docks/loading areas; dropping down the dock ramps; and maneuvering away from the docks. The nearest loading area at the project site would be located approximately 280 feet away from the residential uses to the west along Atherton Drive. Typically, heavy truck operations generate a noise level of 64 dBA at a distance of 50 feet.¹² While there would be temporary noise increases during truck maneuvering and engine idling, these impacts would be of short duration and infrequent. *Table 19* shows that truck and loading area noise would not exceed the City's General Plan standards in Policy N-P-4 and Section 17.58.050 of the Municipal Code.

Parking Areas

Traffic associated with parking areas is typically not of sufficient volume to exceed community noise standards, which are based on a time-averaged scale such as the CNEL scale. However, the instantaneous maximum sound levels generated by a car door slamming, engine starting up and car pass-bys may be an annoyance to adjacent noise-sensitive receptors. Parking lot noise can also be considered a "stationary" noise source. The instantaneous maximum sound levels generated by a car door slamming, engine starting up, and car pass-bys range from 53 to 61 dBA at 50 feet. Conversations in parking areas may also be an annoyance to sensitive receptors. Sound levels of speech typically range from 33 dBA at 48 feet for normal speech to 50 dBA at 50 feet for very loud speech. It should be noted that parking lot noise are instantaneous noise levels compared to noise standards in the DNL scale, which are averaged over time. As a result, actual noise levels over time resulting from parking lot activities would be far lower. *Table 19* shows that parking area noise would not exceed the City's General Plan standards in Policy N-P-4 and Section 17.58.050 of the Municipal Code.

Drive-Thru Operations

The proposed project would include several drive-thru restaurants with menu boards and intercoms that would be located near the restaurant building. Project noise sources from drive-thru operations include amplified speech from the intercom, idling vehicles, and vehicles circulating along the drive-thru lane. The measured noise level associated with active drive-thru operations is 64 dBA at a distance of 20 feet. The nearest sensitive receptors (single-family residences to the west) are located within approximately 640 feet from the proposed menu board and intercom, and as close as 580 feet from the drive-thru lane/queuing area. *Table 19* shows that drive-thru operation noise would not exceed the City's General Plan standards in Policy N-P-4 and Section 17.58.050 of the Municipal Code.

¹² Elliott H. Berger, Rick Neitzel, and Cynthia A. Kladden, *Noise Navigator Sound Level Database with Over 1700 Measurement Values*, July 6, 2010.

Landscape Maintenance Activities

Development and operation of the project includes new landscaping that would require periodic maintenance. Noise generated by a gasoline-powered lawnmower is estimated to be approximately 70 dBA at a distance of five feet. Landscape maintenance activities would be 50 dBA at 50 feet away and 44.0 dBA at the closest sensitive receptor approximately 100 feet away. Maintenance activities would operate during daytime hours for brief periods of time as allowed by the City Municipal Code and would not permanently increase ambient noise levels in the project vicinity and would be consistent with activities that currently occur at the surrounding uses. *Table 19* shows that landscape maintenance noise would not exceed the City's General Plan standards in Policy N-P-4 and Section 17.58.050 of the Municipal Code.

Summary

As shown in *Table 19*, stationary sources would not exceed the Policy N-P-4 of the City's General Plan or Section 17.58.050 of the Municipal Code at the nearest residential uses. Additionally, noise levels would be further attenuated by intervening terrain and structures and were not accounted for in the noise calculations in *Table 19*. Therefore, operational noise impacts associated with on-site activities would be less than significant.

Table 19: Operational Noise Levels

Nearest Land Use	Distance (feet) ¹	Reference Level at 50 ft (dBA)	Section 17.58.050 of the Municipal Code			Policy N-P-4			
			Noise Level at Receiver	Exterior Noise Standard (L _{eq})	Exceed Threshold	Noise Level at Receiver	Exterior Noise Standard (L _{eq})	Exterior Noise Standard (L _{max})	Exceed Threshold
Mechanical Equipment									
Residences (West)	215	52 dBA ²	39.3 dBA	60 dBA	NO	39.3 dBA	50 dBA	70 dBA	NO
Residences (South)	260		37.7 dBA		NO	37.7 dBA			NO
Loading Area									
Residences (West)	280	64 dBA ²	49.0 dBA	60 dBA	NO	49.0 dBA	50 dBA	70 dBA	NO
Residences (South)	315		48.0 dBA		NO	48.0 dBA			NO
Parking Area/Gas Dispensing Activities									
Residences (West)	185	61 dBA ³	49.6 dBA	60 dBA	NO	49.6 dBA	50 dBA	70 dBA	NO
Residences (South)	210		48.5 dBA		NO	48.5 dBA			NO
Drive-Thru Operations									
Residences (West)	580	56 dBA ⁴	45.9 dBA	60 dBA	NO	45.9 dBA	50 dBA	70 dBA	NO
Residences (South)	580		45.3 dBA		NO	45.3 dBA			NO
Landscape Maintenance									
Residences (West)	100	61 dBA ⁵	34.7 dBA	60 dBA	NO	34.7 dBA	50 dBA	70 dBA	NO
Residences (South)	100		34.7 dBA		NO	34.7 dBA			NO
<div>1. The distance is from the location of the operational noise source to the sensitive receptor property line.</div> <div>2. Elliott H. Berger, Rick Neitzel, and Cynthia A. Kladden, <i>Noise Navigator Sound Level Database with Over 1700 Measurement Values</i>, July 6, 2010.</div> <div>3. Kariel, H. G., <i>Noise in Rural Recreational Environments</i>, Canadian Acoustics 19(5), 3-10, 1991.</div> <div>4. Drive-thru noise sample collected by Kimley-Horn on August 17, 2018.</div> <div>5. U.S. EPA, <i>Noise from Construction Equipment and Operations, Building Equipment, and Home Appliances</i>, 1971.</div> <div>6. Table 17.58.050-1 of the City's Municipal Code limits hourly average noise levels to 60 dBA L_{eq} between the hours of 7:00 a.m. and 10:00 p.m. and to 50 dBA L_{eq} between the hours of 10:00 p.m. and 7:00 a.m. at single family residential land uses.</div> <div>7. Policy N-P-4 of the City's General Plan establishes the noise level requirements as thresholds for stationary noise sources. Municipal Code Table 9-2 limits hourly average noise levels to 50 dBA L_{eq} between the hours of 7:00 a.m. and 10:00 p.m. and to 45 dBA L_{eq} between the hours of 10:00 p.m. and 7:00 a.m. Further, maximum instantaneous noise levels shall not exceed 70 dBA L_{max} between the hours of 7:00 a.m. and 10:00 p.m. and 65 dBA L_{max} between the hours of 10:00 p.m. and 7:00 a.m.</div>									

b) *Generation of excessive groundborne vibration or groundborne noise levels?*

Less Than Significant Impact.

Construction

Increases in groundborne vibration levels attributable to the project would be primarily associated with construction-related activities. Construction on the project site would have the potential to result in varying degrees of temporary groundborne vibration, depending on the specific construction equipment used and the operations involved. Ground vibration generated by construction equipment spreads through the ground and diminishes in magnitude with increases in distance. The effect on buildings located in the vicinity of the construction site often varies depending on soil type, ground strata, and construction characteristics of the receiver building(s). The results from vibration can range from no perceptible effects at the lowest vibration levels, to low rumbling sounds and perceptible vibration at moderate levels, to slight damage at the highest levels. Groundborne vibrations from construction activities rarely reach levels that damage structures.

The types of construction vibration impacts include human annoyance and building damage. Human annoyance occurs when construction vibration rises significantly above the threshold of human perception for extended periods of time. Building damage can be cosmetic or structural. Ordinary buildings that are not particularly fragile would not experience cosmetic damage (e.g., plaster cracks) at distances beyond 30 feet. This distance can vary substantially depending on soil composition and underground geological layer between vibration source and receiver.

The FTA has published standard vibration velocities for construction equipment operations. In general, depending on the building category of the nearest buildings adjacent to the potential pile driving area, the potential construction vibration damage criteria vary. For example, for a building constructed with reinforced concrete with no plaster, the FTA guidelines show that a vibration level of up to 0.50-inch per second (in/sec) peak particle velocity (PPV) is considered safe and would not result in any construction vibration damage.

Table 20: Typical Construction Equipment Vibration Levels, lists vibration levels at 25 feet, 50 feet, and 75 feet for typical construction equipment. Groundborne vibration generated by construction equipment spreads through the ground and diminishes in magnitude with increases in distance. As indicated in *Table 20*, based on FTA data, vibration velocities from typical heavy construction equipment operations that would be used during project construction range from 0.003 to 0.089 in/sec PPV at 25 feet from the source of activity.

Table 20: Typical Construction Equipment Vibration Levels

Equipment	Peak Particle Velocity At 25 feet (in/sec)	Peak Particle Velocity At 50 feet (in/sec)	Peak Particle Velocity At 75 feet (in/sec)
Large Bulldozer	0.089	0.032	0.017
Loaded Trucks	0.089	0.032	0.017
Rock Breaker	0.076	0.027	0.015
Jackhammer	0.035	0.012	0.007
Small Bulldozer/Tractors	0.003	0.001	0.001
1. Calculated using the following formula: $PPV_{equip} = PPV_{ref} \times (25/D)^{1.5}$, where: PPV_{equip} = the peak particle velocity in in/sec of the equipment adjusted for the distance; PPV_{ref} = the reference vibration level in in/sec from Table 7-4 of the Federal Transit Administration, Transit Noise and Vibration Impact Assessment Manual, 2018; D = the distance from the equipment to the receiver.			
Source: Federal Transit Administration, Transit Noise and Vibration Impact Assessment Manual, September 2018.			

As shown in *Table 20*, the highest vibration levels are achieved with the large bulldozer operations. This construction activity is expected to take place during grading. The nearest structure is approximately 100 feet from the active construction zone. As indicated in *Table 20*, construction vibration levels at the nearest sensitive receptors (100 feet away) would not exceed 0.017 in/sec PPV and/or the FTA's 0.20 PPV threshold. In addition, construction activities would occur throughout the project site and would not be concentrated at the point closest to the nearest structure. Therefore, vibration impacts associated with the project would be less than significant.

Operations

The project would not generate groundborne vibration that could be felt at surrounding uses. Project operations would not involve railroads or substantial heavy truck operations, and therefore would not result in vibration impacts at surrounding uses. As a result, impacts from vibration associated with project operation would be less than significant.

- c) *For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?*

Less Than Significant Impact. The nearest airport to the project site is the Stockton Metropolitan Airport located approximately 7.7 miles north of the project site. The project site lies outside of the CNEL noise contours shown in the Stockton Metropolitan Airport Land Use Compatibility Plan Update report published in May 2016 and amended in February 2018.¹³ Aircraft-related noise at the project site would not substantially increase ambient noise levels. Exterior noise levels resulting from aircraft would be compatible with the proposed project. By ensuring compliance with the City's normally acceptable noise level standards, interior noise levels would also be considered acceptable with aircraft noise. Therefore, the project would not expose people residing or working in the project area to excessive airport- or airstrip-related noise levels and no mitigation is required.

¹³ San Joaquin County's Aviation System Stockton Metropolitan Airport, *Airport Land Use Compatibility Plan Update for Stockton Metropolitan Airport*, May 2016.

Cumulative Impacts

Cumulative Construction Noise

The project's construction activities, when properly mitigated, would not result in a substantial temporary increase in ambient noise levels. The City limits construction to the hours of 7:00 a.m. to 7:00 p.m. on Monday through Friday. The project would contribute to other proximate construction noise impacts if construction activities were conducted concurrently. However, based on the noise analysis above, the project's construction-related noise impacts would be less than significant following compliance with local regulations and the Construction Noise Management Plan outlined in this study.

Construction activities at other planned and approved projects would be required to take place during daytime hours, and the City and project applicants would be required to evaluate construction noise impacts and implement mitigation, if necessary, to minimize noise impacts. Each project would be required to comply with the applicable City of Manteca Municipal Code limitations on allowable hours of construction. Therefore, project construction would not contribute to cumulative impacts and impacts in this regard are not cumulatively considerable.

Cumulative Operational Noise

Cumulative noise impacts describe how much noise levels are projected to increase over existing conditions with the development of the project and other foreseeable projects. Cumulative noise impacts would occur primarily as a result of increased traffic on local roadways due to buildout of the project and other projects in the vicinity. However, noise from generators and other stationary sources could also generate cumulative noise levels.

Stationary Noise

As discussed above, impacts from the project's operations would be less than significant. Due to site distance, intervening land uses, and the fact that noise dissipates as it travels away from its source, noise impacts from on-site activities and other stationary sources would be limited to the project site and vicinity. No known past, present, or reasonably foreseeable projects would compound or increase the operational noise levels generated by the project. Thus, cumulative operational noise impacts from related projects, in conjunction with project-specific noise impacts, would not be cumulatively significant.

Traffic Noise

A project's contribution to a cumulative traffic noise increase would be considered significant when the combined effect exceeds perception level (i.e., auditory level increase) threshold. As described above, implementation of the project would generate increased traffic volumes along study roadway segments. The project is expected to generate a net of 10,944 average daily trips, which would result in noise increases on project area roadways. Airport Way south of SR-120 eastbound ramps has approximately 17,840 average daily trips.¹⁴ Therefore, a maximum of 10,944 daily project trips would not triple the existing traffic volume per day. Operational related traffic noise would not be noticeable and would not create a significant noise impact

5.14 POPULATION AND HOUSING

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Issues	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
POPULATION AND HOUSING. Would the project:				
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?			X	
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?			X	

- a) *Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?*

Less Than Significant Impact. The project site is currently zoned general commercial and designated general commercial in the General Plan. The proposed project does not propose any residential uses that could generate new residents within the City. The proposed project includes a hotel, retail shops, a grocery store, and gas station. The hotel would not support permanent housing and wouldn't induce substantial population growth. The retail shops, grocery store, and gas station would serve the existing population in the surrounding area and would not substantially induce unplanned population growth. In addition, project construction and operation would create new employment opportunities. The workers are anticipated to come from within the City or surrounding jurisdictions and commute daily to the site. Although it is possible that demand for workers could induce some people to move to the area this is anticipated to be a small number relative to total demand for construction workers and permanent employees. It is anticipated that with the recent and continuing growth of the City, there are adequate numbers of people already residing in the area to work on or at The Crossings site. Therefore, impacts from the proposed project to unplanned population growth are less than significant.

- b) *Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?*

Less than significant Impact. As mentioned above, the project site is not zoned or designated in the General plan to be used for residential. On a portion of the project site is the Sterling Home Showcase, this is a retailer with an existing display center located on the project site. The proposed project would require demolition of 11 showcase structures, these building are not used for permanent or temporary housing, and there are no people residing in the buildings on the project site. There are no other housing units, or structures on the project site, therefore the project would

not displace housing or people, or require construction of replacement housing elsewhere. Therefore, impacts would be less than significant.

Cumulative Impacts

Overall, the project site would serve the exiting demand from the population within the local vicinity. The proposed Project would be consistent with the planned land uses in the City's General Plan and the population and employment projections for the City and the region as a whole. Impacts from cumulative growth are considered in the context of their consistency with these local and regional planning efforts. Therefore, the proposed Project would not cause a cumulatively considerable impact on population and housing and no mitigation is required.

5.15 PUBLIC SERVICES

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Issues	Less Than Significant With Mitigation Incorporat ed	Less Than Significant Impact	No Impact
PUBLIC SERVICES. Would the project:				
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
i) Fire protection?			X	
ii) Police protection?			X	
iii) Schools?			X	
iv) Parks?			X	
v) Other public facilities?			X	

a) *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:*

i) *Fire protection?*

Less Than Significant Impact. There are 5 Fire Stations located within the City of Manteca. Fire Station 242 at 1154 S. Union Road is the closest to the project site, located 1.2 miles northeast. The City Manteca's Fire Department will review the development plans for the Project to ensure the development adheres to the Fire Departments requirements and the Project would include the payment of standard City development impact fees, which include a fee for fire protection service impacts. The nominal population growth associated with the project would incrementally increase the demand for fire protection and emergency medical services to the project site. The project falls within the existing service area for the fire department and would not have a significant effect on response times. Additionally, the project does not propose, and would not create a need for, new/physically altered fire protection facilities, thus, less than significant environmental impacts

would occur in this regard. Finally, the project would be constructed to meet the latest CBC requirements and the project is subject to fire suppression development impact fees and other standards and conditions required by the City and County Fire. As such, a less than significant impact would occur.

ii) Police protection?

Less Than Significant Impact. The City of Manteca's Police Department is under contract to provide police protection and public safety services within the city, including the Project site. The Manteca Police Department is located approximately 1.8 miles northeast from the project site. The nominal population growth associated with the project would incrementally increase the demand for police protection services to the project site. However, the proposed mixed-use development would not result in any unique or more extensive crime problems that cannot be handled with the existing level of police resources. Additionally, the project would not have a significant impact on police response times, because the project site is within the Police's existing service area. Therefore, project impacts concerning police protection services would be less than significant and no mitigation is required. Additionally, the project does not propose, and would not create a need for, new/physically altered police protection facilities; thus, less than significant environmental impacts would occur in this regard.

iii) Schools?

Less Than Significant Impact. The following schools are in the local vicinity of the project site; Sierra High School approximately 1 mile to the northeast, Veritas School approximately 1.3 miles east, Sequoia Elementary School approximately 1.7 miles northeast, and Brock Elliot Elementary approximately 0.9 miles northeast. The nominal population growth due to the proposed project would not cause any significant increase of demand on the above listed schools in the area. According to Government Code Section 65996, the payment of development fees authorized by SB 50 are deemed to be full and complete school facilities mitigation. The Project would be required to pay mandated development fees for residential buildings. As such, impacts are anticipated to be less than significant impact.

iv) Parks?

Less Than Significant Impact. Parks in the local vicinity to the project site include, Bella Vista Park approximately 0.1 miles, Dutra Estates Park approximately 0.5 miles, Dutra Southeast Park approximately 0.3 miles, and Manteca Watershed by Costco located on the other side of SR 120 approximately 0.1 miles. Due to The Crossings proposed uses it is not anticipated that the project would create additional need for recreational facilities. The project itself does propose a picnic area/pocket park that customers could use. The project overall would only result in nominal population growth. Although the project would bring new residents to the general area, the use of surrounding parks and other facilities has been accounted for in the General Plan. The proposed mixed-use development would not significantly increase the demand of such services and a less than significant impact would occur.

v) *Other public facilities?*

Less Than Significant Impact. Other public facilities in the area such as health care, production, commercial, retail, residential, etc. would not be adversely impacted because the proposed Project is consistent with the City of Manteca and is consistent with City Zoning Maps. Therefore, impacts would be less than significant.

Cumulative Impacts

The Project is consistent with current General Plan and Zoning designations, the Project would not result in substantial incremental effects to public services or facilities that could be compounded or increased when considered together with similar effects from other past, present, and reasonably foreseeable Projects. The Project alone would not result in cumulatively considerable impacts to public services or facilities.

5.16 RECREATION

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Issues	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impa ct
RECREATION.				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?			X	
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?			X	

- a) *Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?*

Less Than Significant Impact. The closest existing neighborhood park is Bella Vista Park at 1580 Bella Terra Dr, Manteca, located in residential community just 0.1 miles south of the project site. Use to the nature of commercial uses proposed on The Crossings it is not likely to generate an increase in population that would use existing recreational facilities in the area. The proposed commercial uses on the Crossings project site include, a car wash, gas station, restaurants (sit down and drive through), hotel, grocery, etc. These uses do not lead to a population that would increase use in the surrounding area, such that substantial physical deterioration of recreational facilities would occur or be accelerated. Therefore, the project would have a less than significant impact.

- b) *Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?*

Less Than Significant Impact. The Crossings project does propose a picnic area/pocket park in the center of the site along the northern boundary between shops G and F. The pocket park would be accessible by interior site walkways to encourage pedestrian activity within the multi-use commercial development. The park would be approximately 6,500 square feet and include a seating area with landscaping for passive recreational use. The proposed pocket park would not have a significant adverse physical effect on the environment, and therefore, potential impacts would be less than significant.

Cumulative Impacts

Development of the proposed Project is not anticipated to create a significant cumulative increase of recreational facilities, as the picnic area/pocket park is a minor area within The Crossings site

development footprint. The project additionally does not impact any existing recreation facilities and would create a substantial population increase to impact existing recreational facilities. Therefore, no cumulative impacts on recreational facilities would occur.

5.17 TRANSPORTATION

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Issues	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
TRANSPORTATION. Would the project:				
a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?		X		
b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?			X	
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			X	
d) Result in inadequate emergency access?			X	

- a) *Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?*

Less Than Significant With Mitigation Incorporated. Airport Way is a two-lane arterial road that passes through residential and agricultural uses. It is planned to be a four-lane facility. The Draft City of Manteca General Plan proposes a class I multi-use path along Airport Way near the SR 120 interchange. W. Atherton Dr. is a four-lane collector road that runs south of and parallel to SR 120. There is a class I bike path parallel to W. Atherton Drive. The roadway currently has sidewalks on the south side of the roadway where a single-family residential development is located. No marked crosswalks are available in the vicinity of the project. Manteca Transit Route 4 loop service runs along Airport Way from W. Woodward Ave. connecting Manteca Transit Center on Main St. The closest bus stop is located near the intersection of Airport Way and Peregrine St. within a quarter-mile of the project site. The project proposes six driveways along W. Atherton Drive and one right-in/right-out access point on Airport Way. The proposed site would utilize the existing sidewalk facility available on W. Atherton Drive and Airport Way and also provide pedestrian walkways to access the stores and parking spots.

A Preliminary Traffic Study was conducted and summarized in a technical memorandum prepared by TJKM. The study provides an overview on trip generation, site access, circulation, and potential impacts on nearby intersections. The report focuses on two study intersections; 1) the intersection at W. Atherton Dr and Airport Way and 2) the intersection at W. Atherton Way and Langum Way. The study multiple scenarios in the AM and PM peak hours to determine the potential project impacts associated with traffic:

- Existing Conditions
- Existing Conditions Plus Project Conditions
- Mitigated Conditions

Analysis of environmental impacts at the study intersections were based on the concept of Level of Service (LOS). LOS is measured on a scale from A to F, with A representing the best traffic conditions and F the worst. The City of Manteca's General Plan establishes an LOS Standard that will guide street improvements in the City while meeting the City's goals of developing an efficient circulation system that promotes travel via other modes. The General Plan requires a vehicular LOS of D or better at all streets and intersections, except in the Downtown area where right-of-way is limited, pedestrian, bicycle, and transit mobility are most important and vehicular LOS is not a consideration (City of Manteca, 2011). See *Table 21, Intersection LOS Analysis*.

Table 21: Intersection LOS Analysis

Study Intersection	Control	Peak Hour	Existing Condition LOS	Existing plus Project Conditions LOS
W. Atherton Dr. and Airport Way	All-Way Stop	A.M.	C	E
		P.M.	E	F
	Signal	A.M.		A
		P.M.		B
W. Atherton Dr. and Langum Way	One-Way Stop	A.M.	A	B
		P.M.	A	C
	Signal	A.M.		A
		P.M.		A

The report concludes that the study intersections, with the installation of traffic signals, both intersections function with an acceptable LOS. The project includes the construction of both traffic signals thus, the project is not expected to create any significant delays in levels of service at the study intersections or on pedestrian and bicycle access and circulation. Therefore, the proposed project would have a less than significant impact and no mitigation measures are required.

However, during construction, the predominant vehicle routes (for haul trucks) would follow either Airport Way from SR 120 and then turn onto W. Atherton Drive. The presence of large and slow-moving vehicles and construction equipment on streets in the vicinity of the project site may result

in potential hazards to motorists. Additionally, project construction activities may result in temporary lane closures along Airport Way and W. Atherton Drive.

Accordingly, mitigation is proposed requiring the project applicant to implement a Construction Traffic Control Plan during construction activities to minimize impacts on surrounding roadways and nearby parking areas, as provided under Mitigation Measure MM TRANS-1. With implementation of MM TRANS-1, potential impacts are considered less than significant.

MM TRANS-1: Prior to issuance of grading permits, the applicant shall submit a Construction Traffic Control Plan to the City of Manteca for review and approval. The plan shall identify the timing and routing of all major construction equipment and trucking to avoid potential traffic congestion and delays on the local street network. The plan shall encourage the use of SR 120, Airport Way, and W. Atherton Drive wherever practical. Anticipated temporary road closures should be identified, along with safety measures and detours. If necessary, construction equipment and materials deliveries shall be limited to off-peak hours to avoid conflicts with local traffic circulation. The plan shall also identify suitable locations for construction worker parking.

b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

Less Than Significant Impact. CEQA Guidelines Section 15064.3 states that “vehicle miles traveled” (VMT) is the preferred metric evaluating transportation impacts, rather than LOS. VMT measures the total miles traveled by vehicles generated by a project. While LOS focuses on motor vehicle traffic, VMT accounts for the total environmental impact of a project on transportation, including use of travel modes such as buses or bicycles. Section 15064.3(b) sets forth the criteria for analyzing transportation impacts using the preferred VMT metric.

SB 743 is part of a long-standing policy effort by the California legislature to improve California’s sustainability and reduce greenhouse gas emissions through denser infill development, a reduction in single occupancy vehicles, improved mass transit, and other actions. Recognizing that the current environmental analysis techniques are, at times, encouraging development that is inconsistent with this vision, the legislature has taken the extraordinary step to change the basis of environmental analysis for transportation impacts from Level of Service (LOS) to Vehicle Miles Travelled (VMT). VMT is understood to be a good proxy for evaluating Greenhouse Gas (GHG) and other transportation related impacts that the State is actively trying to address. While the use of VMT to determine significant transportation impacts has only been considered recently, it is by no means a new performance metric and has long been used as a basis for transportation system evaluations and as an important metric for evaluating the performance of Travel Demand Models.

In January 2019, the Natural Resources Agency finalized updates to the CEQA Guidelines including the incorporation of SB 743 modifications. The Guidelines’ changes were approved by the Office of Administrative Law and are now in effect. Specific to SB 743, Section 15064.3(c) states, “A lead agency may elect to be governed by the provisions of this section immediately. The provisions apply statewide as of July 1, 2020.”

To help aid lead agencies with SB 743 implementation, the Governor’s Office of Planning and Research (OPR) produced the Technical Advisory on Evaluating Transportation Impacts in CEQA (December 2018) that provides guidance about the variety of implementation questions they face with respect to shifting to a VMT metric. Key guidance from this document includes:

- VMT is the most appropriate metric to evaluate a project’s transportation impact.
- OPR recommends tour- and trip-based travel models to estimate VMT, but ultimately defers to local agencies to determine the appropriate tools.
- OPR recommends measuring VMT for residential and office projects on a “per rate” basis.
- OPR states that by adding retail opportunities into the urban fabric and thereby improving retail destination proximity, local-serving retail development tends to shorten trips and reduce VMT. Generally, retail development including stores smaller than 50,000 square feet might be considered local serving.
- OPR recommends that where a project replaces existing VMT-generating land uses, if the replacement leads to a net overall decrease in VMT, the project would lead to a less-than-significant transportation impact. If the project leads to a net overall increase in VMT, then the thresholds described above should apply.
- Lead agencies have the discretion to set or apply their own significance thresholds.

The City of Manteca’s VMT thresholds consider the VMT performance of residential and non-residential components of a project separately, using the efficiency metrics of VMT per capita and VMT per employee, respectively. For retail components of a project, or other customer-focused uses, the citywide VMT change is analyzed. The City of Manteca’s VMT thresholds of significance are summarized below for each of these components:

- Residential – 15% below baseline (existing) average VMT per Capita
- Employment-based land uses (e.g., office) – 15% below baseline (existing) average VMT per Employee
- Customer-based non-residential land uses (e.g., retail) – No net increase in VMT

A Vehicle Miles Traveled (VMT) Assessment was prepared for The Crossings by Kimley-Horn in 2022. The study makes the following assumptions for the purposes of SB 743 analysis and to determine significance.

Retail less *than* 50,000 square feet (Shops A-H and Maverik Gas Station)

The Governor’s Office of Planning and Research’s *Technical Advisory on Evaluating Transportation Impacts in CEQA*¹⁵ specifically addresses some of the key issues surrounding how a local-serving retail store should be evaluated in terms of its VMT impact. As described, the threshold for

¹⁵ *Technical Advisory on Evaluating Transportation Impacts in CEQA*. Governor’s Office of Planning and Research. December 2018. Page 16.

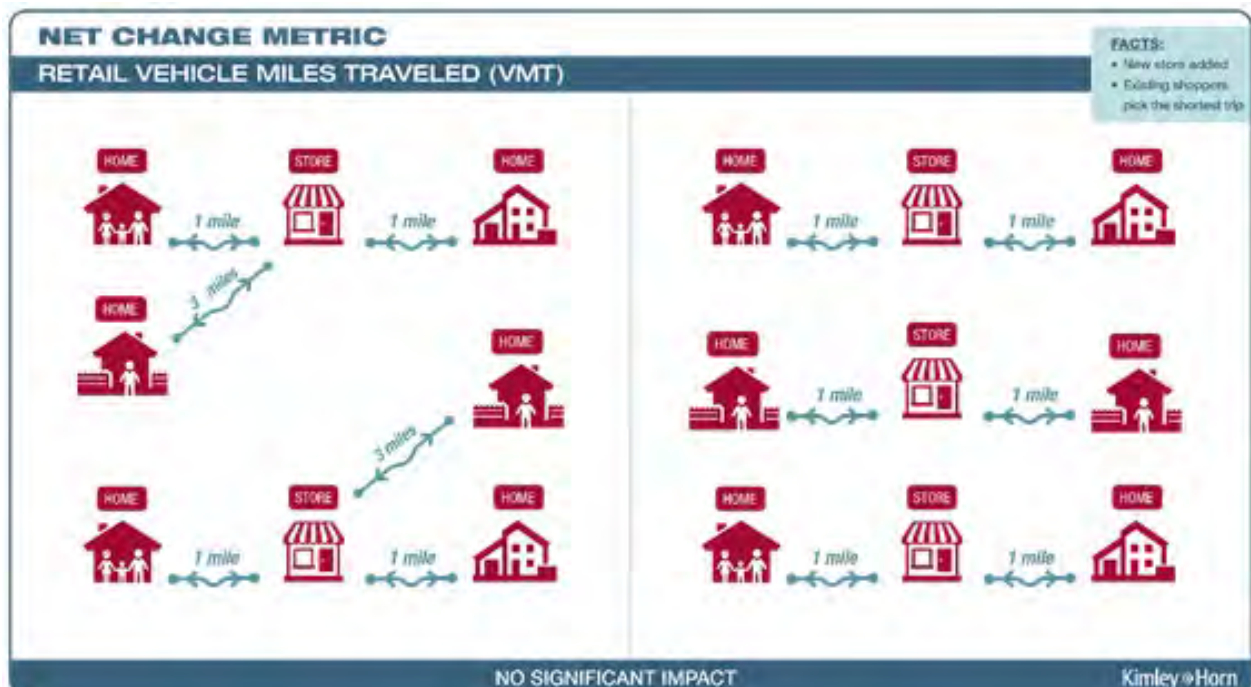
significance for retail uses is “a net increase.” This means that if a proposed retail use results in additional VMT, it would result in a finding of significance.

Local-serving retail primarily serves preexisting needs (i.e., it does not generate new trips because it meets existing demand). Because of this, local-serving retail uses can be presumed to reduce trip lengths when a new store is proposed. Essentially, the assumption is that someone will travel to a newly constructed local-serving store because of its proximity, rather than that the proposed retail store is fulfilling an unmet need (i.e., the person had an existing need that was met by the retail located farther away and is now traveling to the new retail use because it is closer to the person’s origin location). This results in a trip on the roadway network becoming shorter, rather than adding a new trip to the roadway network, which would result in an impact on the overall transportation system. Conversely, residential and office land uses often drive new trips, given that they introduce new participants to the transportation system.

The *Technical Advisory on Evaluating Transportation Impacts in CEQA* provides for a general threshold of 50,000 square feet per establishment as an indicator as to whether a retail store can be considered local-serving or not.

Exhibit 1 visually demonstrates the basis for this finding. Introducing a new retail store often has the effect of redistributing existing customer trips in a manner that reduces average trip lengths, thereby resulting in a VMT reduction (i.e., trip segments that were 3 miles before the new retail store are reduced to 1 mile with the addition of the new retail store). Therefore, it can be presumed that VMT related impacts from the proposed Shops A-H and Maverik Gas Station would be less than significant.

Exhibit 1: Vehicle Miles Traveled (VMT) by Land Use

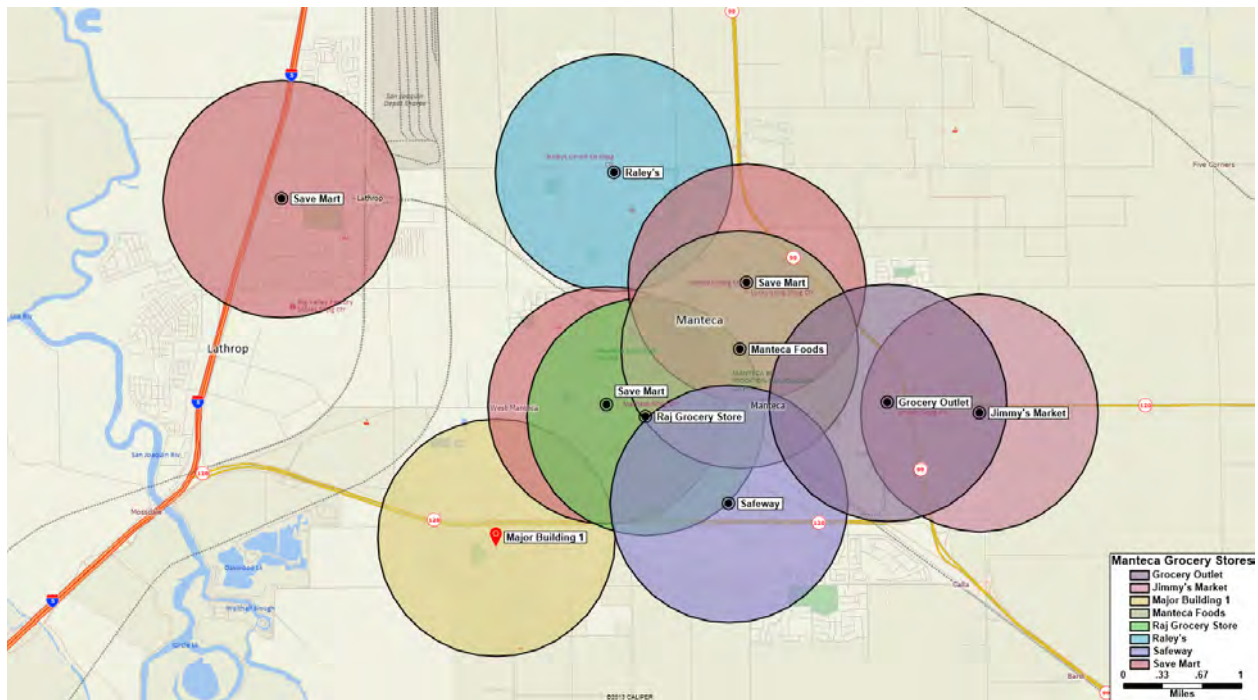


Retail greater than 50,000 square feet (Major Building 1)

Similar to other retail stores, grocery stores primarily serve pre-existing needs (it is assumed Major Building 1 would be a grocery store). The addition of a grocery store does not truly generate new trips that are added to the transportation system, it shortens existing trips. As such, this means that the impact to the transportation system would be reduced by the introduction of a new grocery store that is primarily local in its service focus.

As noted previously, the Technical Advisory provides for a general threshold of 50,000 square-feet as an indicator as to whether a commercial use can be considered local serving or not. As described above, this is an important consideration in terms of a VMT-related significant impact determination. While the proposed Major Building 1 would be 55,000 square-feet, 5,000 square-feet over the 50,000 square-foot indicator, with the lack of grocery stores in the area surrounding the proposed project, it is clearly local serving. The only competing option in the immediate area of the proposed project is the Costco, located on the opposite side of SR-120 to the north. The Costco would not be considered local-serving as it is approximately 150,000 square-feet, requires a membership which can be exclusionary to the general public, and has a customer base that is regional in nature.

The Technical Advisory also provides that a less than significant finding can be further substantiated by showing the proximity of other similar uses. Although a specific market study is not being provided as part of this memorandum, a map showing the proximity of other similar grocery stores is provided as **Exhibit 2**. A one-mile buffer was placed around the nine existing grocery stores in the area, as well as the proposed project, to visually represent the lack of overlapping service area between the proposed project and the existing stores. As shown in **Exhibit 2**, the proposed project, identified with a red icon, labeled “Major Building 1”, and has beige buffer surrounding it, would reduce trip lengths by “adding grocery shopping opportunities into the local area, further improving retail destination proximity”. Accordingly, it is appropriate that the proposed project development be presumed, in accordance with the Technical Advisory, that it would result in a VMT reduction and support the goals of SB 743. Overall, Major Building 1 can shorten existing trip lengths, which would result in a net decrease in VMT. Therefore, it is presumed that the VMT-related impact of Major Building 1 would be less than significant.

Exhibit 2: Proximity of Major Building 1 to Existing Grocery Stores**Hotel**

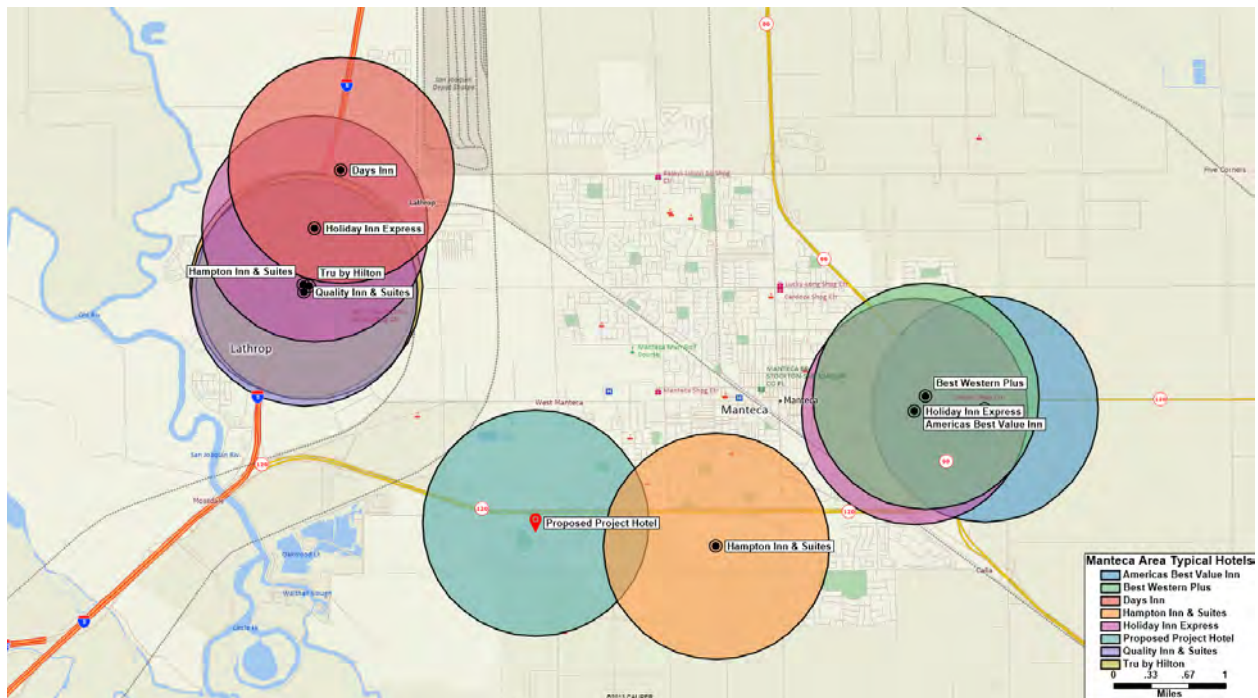
Similar to retail and grocery stores, typical hotels such as the proposed project most often serve pre-existing needs when their client-base is staying at the hotel not because of the amenities, but because of the area surrounding the hotel. Alternatively, destination hotels do not serve pre-existing needs as they offer special amenities that aren't offered elsewhere, and guests typically spend the majority of their time on the destination hotel property. The Great Wolf Lodge Manteca, which is connected to the Great Wolf Lodge Water Park is an example of a destination hotel.

The hotel component of the proposed project would be a typical hotel and it is likely that guests are choosing the hotel because they are traveling to Manteca for a variety of reasons such as business in the area, visiting family and friends, attending baseball tournaments at Big League Dreams Manteca, or visiting the water park across SR-120.

Typical hotels most often they can be presumed to reduce trip lengths when a new hotel is introduced within a cluster of existing hotels located near a local destination or attraction. Essentially, a trip to a hotel is expected to occur due to someone planning to travel to Manteca, or the immediate area, but the proximity of the hotel to the surrounding attractions would drive the length of that trip and the resultant impact to the overall transportation system. Most often this means that the impact to the transportation system would be negligible or reduced by the introduction of a new hotel to an area where people are already traveling and planning on staying unless the hotel significantly effects the local supply of rooms or introduces a significant new attraction.

As with Major Building 1, while a specific market study for the hotel component of the proposed project is not being provided as part of this memorandum, a map showing the proximity of other similar hotels is provided as **Exhibit 3: Proximity of Project Hotel to Existing Hotels**. A one-mile buffer was placed around the nine existing hotels in the area, as well as the proposed project, to visually represent the lack of overlapping service area between the proposed project and the existing hotels. As shown in **Exhibit 3**, the proposed project, identified with a red icon, labeled “Proposed Project Hotel”, and has teal buffer surrounding it, would reduce trip lengths by “adding hotel opportunities into the local area, further improving hotel destination proximity”. Accordingly, it is appropriate that the proposed project development be presumed, in accordance with the Technical Advisory, that it would result in a VMT reduction and support the goals of SB 743. Therefore, overall the proposed hotel would result in a net decrease in VMT and have a less than significant impact.

Exhibit 3: Proximity of Project Hotel to Existing Hotels



Therefore, all components of the proposed project would result in shorter trips and therefore lower VMT. The project would not conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b) and impacts would be less than significant.

- c) *Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?*

Less Than Significant Impact. Within the project site the proposed drive aisles would be of adequate size to provide sufficient space to accommodate standard auto traffic and, where needed, heavy vehicles. The service station is expected to serve both standard vehicles and trucks. Trucks are expected to use the first driveway off of W Atherton Dr to enter the fueling station and

exit through the driveway at the intersection with Langum Way, where they would be able to make a left turn to travel east toward Airport Way. The hotel driveway aisles would accommodate two cars driven parallel to each other. Enough space would be provided behind the major store for loading trucks to access the facility. The loading trucks for the major store/Grocery store would use the final driveway before the proposed hotel for entry. Since the trucks are expected to arrive/depart at off-peak hours, it won't impact the pedestrians accessing the major store. Three restaurants/coffee shops with drive-through windows would have enough space to queue outside the facility. The planned coffee shop is designed with double lane storage to accommodate a higher volume of queuing. The proposed project is not anticipated to increase hazards due to geometric design or incompatible use and impacts would be less than significant.

d) *Result in inadequate emergency access?*

Less Than Significant Impact. Emergency vehicle access would be maintained at all times throughout construction activities, in accordance with the City's routine/standard construction specifications. Further, construction activities would not impede emergency access to any local roadways or surrounding properties. All driveways and internal site access roads would be constructed to accommodate all emergency vehicles and personnel. Further emergency access discussion is located within Section 5.9, Hazards. Project impacts regarding emergency access would be less than significant.

Cumulative Impacts

The project would improve LOS at two intersections with the construction of signals and reduce VMT by shortening trips. Therefore, the proposed project would not result in incremental effects to transportation that could be compounded or increased when considered together with similar effects from other past, present, and reasonably foreseeable probable future projects. Potential impacts are not cumulatively considerable and less than significant.

5.18 TRIBAL CULTURAL RESOURCES

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Issues	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
TRIBAL CULTURAL RESOURCES. Would the project:				
a) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: i) Listed or eligible for listing in the California:				
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?		X		
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?		X		

a) *Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: i) Listed or eligible for listing in the California:*

i) *Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?*

And,

ii) *A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in*

subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?

Less Than Significant With Mitigation Incorporated. A Cultural Resources Study for The Crossings Project site was conducted by Rincon Consultants, Inc. on February 2022. As previously mentioned, there were no historical resources found on-site, this is substantiated through a CHRIS records search, background research, review of historical topographic and aerial imagery, a Sacred Land File Search, and a pedestrian survey. However, the absence of substantial surface prehistoric or historic-period archeological remains within the project vicinity and the existing level of disturbance does not preclude the possibility of subsurface resources. Though the circumstances would present a low possibility, the following mitigation measure (MM) would reduce impacts in the unanticipated discovery of cultural resources during construction. With the implementation of MM CUL-1 and MM CUL-2, impacts would be less than significant.

The City has notified California Native American tribes who have formally requested notification on CEQA projects under Assembly Bill 52. These notification letters were distributed to identified Native American Tribes on November 15, 2021, with no response at this time. These letters are on file at the City of Manteca Community Development Department.

Impacts on tribal cultural resources are considered less than significant with mitigation.

Cumulative Impacts

The combination of the proposed project as well as past, present, and reasonably foreseeable projects in the local area would be required to comply with all applicable State, federal, and County and local regulations concerning preservation, salvage, or handling of cultural and paleontological resources, including compliance with required mitigation. Similar to the proposed project, these projects also would be required to implement and conform to mitigation measures, which would be likely to reduce impacts to less than significant. Although in the process of development, some known or unknown resources may be lost, it is not anticipated that these impacts would be cumulatively considerable. In addition, implementation of Mitigation Measures **MM CUL-1** and **MM CUL-2**, would reduce project-specific impacts to a less than significant level. Therefore, the project's contribution to cumulative impacts would be less than significant.

5.19 UTILITIES AND SERVICE SYSTEMS

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Issues	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
UTILITIES AND SERVICE SYSTEMS. Would the project:				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?			X	
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?			X	
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?			X	
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?			X	
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?			X	

a) *Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?*

And,

c) *Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?*

Less Than Significant Impact. The proposed project would connect to the City's existing water and sanitary sewer system. As part of this connection, the proposed project would not be required to

increase the size of existing water and sanitary sewer lines in order to serve the proposed project. The proposed project would be consistent with planned growth in the General Plan, in that it would be consistent with the type of development planned for this area in the General Plan. The City has sufficient capacity in its domestic water and sanitary sewer systems to accommodate development within the proposed project. Thus, the project would not require the extension of sewer mains, water lines, storm water drainage lines, or natural gas pipelines to the project site, as these lines are already available in W Atherton Dr. Only connecting lines from the project site to these existing facilities would be required. Electrical and telecommunication lines are available in the project vicinity and can be extended to the project site as necessary. The project does not propose the relocation of any existing utility lines or facilities. Project impacts would be less than significant.

b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

Less Than Significant Impact. In 2016, the City adopted the City of Manteca 2015 UWMP, as required by the Urban Water Management Planning Act of 1983. The UWMP serves as a long-term planning document for sustainable water supply, and includes a description of water sources, historical and projected water use, and a comparison of water supply and demand during normal and dry years. The UWMP has identified regional water demand in normal, single dry, and multiple dry years in five-year increments. Water demand projections were based on buildout of the City's General Plan. The UWMP indicates that the City would have up to approximately 30,680 acre-feet per year (AFY) for 2025 and 30,990 AFY for 2030 in a normal year (City of Manteca, 2016). *Table 22* and *Table 23* show the projected water supply and demand totals during a normal year and during a single dry year, respectively. *Table 24* shows the projected supply and demand totals under multiple dry year conditions for the first, second, and third years.

Table 22: Water Supply and Demand – Normal Year (AFY)

	2020	2025	2030	2035	2040
Supply Totals	23,100	30,680	30,990	31,390	31,250
Demand Totals	20,410	23,320	25,060	28,270	31,290
Difference	2,690	7,360	5,930	3,120	(-)40
NOTES: (-) indicates a negative value SOURCE: City of Manteca 2015 Urban Water Management Plan, July 2016					

Table 23: Water Supply and Demand – Single Dry Year (AFY)

	2020	2025	2030	2035	2040
Supply Totals	20,220	26,050	26,360	26,760	26,620
Demand Totals	20,410	23,320	25,060	28,270	31,290
Difference	(-)190	2,730	1,300	(-)1,510	(-)4,670
<p>NOTES:</p> <p>(-) indicates a negative value</p> <p>SOURCE: City of Manteca 2015 Urban Water Management Plan, July 2016</p>					

Table 24: Water Supply and Demand – Multiple Dry Years (AFY)

		2020	2025	2030	2035	2040
1 st Year	Supply Totals	21,580	28,230	28,540	28,940	28,800
	Demand Totals	20,410	23,320	25,060	28,270	31,290
	Difference	1,170	4,910	3,480	670	(-)2,590
2 nd Year	Supply Totals	21,850	28,670	28,980	29,380	29,240
	Demand Totals	20,410	23,320	25,060	28,270	31,290

	Difference	1,440	5,350	3,920	1,110	(-)2,050
3 rd Year	Supply Totals	21,280	27,760	28,070	28,470	28,330
	Demand Totals	20,410	23,320	25,060	28,270	31,290
	Difference	870	4,440	3,010	200	(-)2,960
<p>NOTES:</p> <p>(-) indicates a negative value</p> <p>SOURCE: City of Manteca 2015 Urban Water Management Plan, July 2016</p>						

Based on the above, the City of Manteca anticipates a water supply shortage by 2040 in multiple-dry years. However, as described in the UWMP, three water supply options were identified to address future water supply shortfalls:

1. Reclaimed water: The City can develop their recycled water infrastructure to offset the groundwater used for park irrigation with reclaimed water. The quantity of groundwater replaced by recycled water can then be used for potable municipal uses, while staying within the sustainable yield constraints of 1 AFY/Ac.
2. Additional untreated surface water: As the City annexes areas, the raw water that irrigated the annexed lands could either be treated for potable municipal uses or used to offset the potable water used for irrigation.
3. Additional treated surface water: The City could negotiate and obtain additional potable water supply from the South County Water Supply Program.

Inclusion of the above water supply options as well as implementation of the City's Water Shortage Contingency Plan would ensure that adequate water supplies are available to serve buildout of the General plan. Therefore, projected water supplies would be sufficient to satisfy water demands associated with the proposed project while still meeting the current and projected water demands of existing customers within the service area. Impacts would be less than significant.

- d) *Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?*

And,

- e) *Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?*

Less Than Significant Impact. The City of Manteca Solid Waste Division (SWD) provides solid waste hauling service for the City of Manteca and would serve the proposed project. The nearest landfill to the project site is approximately 7.5 miles to the northeast of the project site. Solid waste is collected by the City and deposited at the Forward Landfill. Recyclables are taken to a mini transfer station adjacent to the Forward Landfill where they are subsequently put into transfer trucks and hauled to Sacramento Recycling in Sacramento. According to Cal Recycle, the Forward Landfill has a closure date of 2053 and is currently operating at 50% capacity. The proposed project would be consistent with planned growth in the Manteca 2023 General Plan, in that it would be consistent with the type of development planned for this area in the Manteca 2023 General Plan. Therefore, the proposed project's waste generation has already been addressed in the Manteca 2023 General Plan EIR. Therefore, the capacity identified in the Manteca 2023 General Plan EIR, is more than sufficient to serve the proposed project. Because the Forward Landfill has adequate capacity for the construction and operation of the Proposed Project would have a less than significant impact.

The proposed project would not interfere with regulations related to solid waste or generate waste in excess of the capacity of local infrastructure. The proposed project would have a less than significant impact in this regard.

Cumulative Impacts

Utilities are generally provided or delivered on a local level but often originate from sources outside of the City as part of a regional distribution system. Similar to the project, other projects within the City would be required to adhere to the Standard Conditions of Approval related to water efficiency, utilities services and plans, and drainage. As shown above a cumulative analysis of water supply and demand was identified for multiple water years. With the inclusion of the additional water supply options and the City's Water Shortage Contingency Plan. Therefore, implementation of the project would not result in a cumulatively considerable contribution to impacts on water supply and wastewater, stormwater, or solid waste generation.

The coordination process associated with the preparation of development and infrastructure plans is intended to ensure that adequate resources are available to serve both individual projects and cumulative demand for resources and infrastructure as a result of cumulative growth and development in the area. Individual projects are subject to review for utility capacity to avoid unanticipated interruptions in service or inadequate supplies. Other planned projects are subject to connection and service fees to assist in facility expansion and service improvements triggered by an increase in demand. The proposed project would not result in incremental impacts to utilities or service systems, that taken in sum with past, present, and reasonably foreseeable projects, would not result in significant cumulative utility impacts.

5.20 WILDFIRE

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Issues	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
WILDFIRE. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?			X	
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?			X	
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?			X	
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?			X	

a) *Substantially impair an adopted emergency response plan or emergency evacuation plan?*

Less Than Significant Impact. The Project site is not located in or near a LRA or SRA, nor is the site designated as a VHFHSZ. Additionally, the Project would comply with all local regulations related to emergency access/evacuation. As such, a less than significant impact would occur in this regard.

b) *Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?*

Less Than Significant Impact. Refer to the previous response a).

c) *Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?*

Less Than Significant Impact. The project includes standard infrastructure, including roadways, utilities, and fire suppression systems. All of this infrastructure is designed to reduce the risk of fire. Following compliance with the established local and state regulatory framework discussed

above, the project would not expose people or structures to a significant risk involving wildland fires and impacts would be less than significant in this regard.

- d) *Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?*

Less Than Significant Impact. The Project site is not in a VHFHSZ nor located near steep slopes or hillsides. The Project would implement efficient landscape maintenance practices and design measures to decrease the release of stormwater running off the site; therefore, the Proposed project site would not expose people to downstream flooding or landslides as a result of runoff. Impacts would be less than significant.

Cumulative Impacts

The proposed Project area is not subject to natural wildfire areas. Consequently, Project implementation would not create a significant cumulative impact that would exacerbate wildfires. Impacts would be less than significant.

5.21 MANDATORY FINDINGS OF SIGNIFICANCE

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Issues	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
21. MANDATORY FINDINGS OF SIGNIFICANCE. Does the project:				
a) Have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?		X		
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?			X	
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			X	

- a) *Have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?*

Less Than Significant With Mitigation Incorporated. This Initial Study includes an analysis of the project impacts associated with aesthetics, agricultural and forest resources, air quality, biological resources, cultural resources, energy, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services, recreation, transportation and traffic, tribal cultural resources, and utilities and service systems. The analysis covers a broad spectrum of topics relative to the potential for the proposed project to have environmental impacts. This includes the potential for the proposed project to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to

drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory. It was found that the proposed project would have either no impact, a less than significant impact, or a less than significant impact with the implementation of mitigation measures. For the reasons presented throughout this Initial Study, the proposed project would not substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory. With the implementation of mitigation measures presented in this Initial Study, the proposed project would have a less than significant impact relative to this topic. Therefore, this project has been determined not to meet this Mandatory Finding of Significance.

- b) *Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?*

Less Than Significant Impact. Per the criteria for evaluating environmental impacts in this Initial Study, the potential for adverse cumulative effects were considered in the response to each question in sections 1 through 21 of this checklist. In addition to project specific impacts, this evaluation considered the project's potential for incremental effects that are cumulatively considerable. As a result of this initial study, no cumulative effects associated with the proposed project have been identified. Therefore, this project has been determined not to meet this Mandatory Finding of Significance.

- c) *Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?*

Less Than Significant Impact. Potential adverse project effects on human beings were discussed in Section 5.3, Air Quality; Section 5.7, Geology and Soils (seismic hazards); Section 5.9, Hazards and Hazardous Materials; Section 5.10, Hydrology and Water Quality (flooding); Section 5.17, Transportation (traffic hazards); and Section 5.20, Wildfire. For most aspects of these issues, no potential adverse effects on human beings were identified. Potential adverse effects that were identified would be reduced to levels considered less than significant through compliance with applicable laws, regulations, and City ordinances and standards, along with mitigation measures where necessary. Therefore, this project has been determined not to meet this Mandatory Finding of Significance.

6.0 REFERENCES

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APPENDIX A

AIR QUALITY MODELING DATA

APPENDIX B
HEALTH RISK ASSESSMENT (HRA) MODELING DATA

APPENDIX C

SJCOG ADVISORY STATEMENT

APPENDIX D
SJCOG CERTIFICATE OF PAYMENT

APPENDIX E
CULTURAL RESOURCES STUDY

APPENDIX F
ENERGY CALCULATIONS MODELING DATA

APPENDIX G
GREENHOUSE GAS MODELING DATA

APPENDIX H
NOISE MEASUREMNT FIELD DATA

